LETTER PERFECT ^{T.M. LJK}

WORD PROCESSING FOR THE
ATARI 400 AND 800 COMPUTERS
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1981, 1982

VERSION 2.0

LETTER PERFECT

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I. INTRODUCTION

LETTER PERFECT is a character-oriented word processing system for the Atari 400 and 800 computers with a minimum of 24K of memory and at least one disk drive. LETTER PERFECT will enable you to write form letters, books, magazine articles, topical reports, business reports, or anything that requires a professional and personally prepared appearance. You will be able to edit with ease, automatically replace words, insert characters, delete characters, search the text, and move whole blocks of text.

You will be able to save your work on magnetic diskettes for storage purposes and print it on a printer. The computer does all of the tedious work for the operator. Difficult tasks such as justifying, centering, automatic page numbering, and changing formats, just to mention a few, will all be done by the computer.

Read this manual carefully to get the most from the program. It will help you learn how to use the program. Special care has been taken to show you some tricks that can be used.   An index is provided for reference purposes.

FILL OUT THE PROGRAM REGISTRATION FORM

The Program Registration Form and Software License Agreement are opposite this page in the manual. They _must be filled out and mailed within 10 days_ to LJK Enterprises, Inc. If you fail to do this, you will lose backup privileges and future updates. This subject is covered in detail at the end of the manual, but

please take one minute now to complete these forms and mail them to us. One side is not enough. Both sides must be filled out and mailed to LJK for you to receive backup copies and updates of LETTER PERFECT.

COPYING YOUR PROGRAM - The program diskette has been written so that you may not make a copy. The program is copywritten and is placed on the diskette in a form that is not copyable. If you attempt to copy the program, you could damage it. LJK Enterprises, Inc. is not responsible for a program destroyed in an attempt to copy it. Read the section on PROGRAM REGISTRATION at the end of this manual to see how to protect your investment. You must fill out the two forms described in the preceding paragraph to take advantage of these privileges. Willful violations of the Copyright Laws of the United States can result in civil damages of up to $50,000 in addition to actual damages. Criminal penalties of up to one-year imprisonment and/or a $10,000 fine could also be imposed.

II. LOADING THE PROGRAM

To load the program, turn the power switch of the disk drive to the "ON" position without a diskette in the drive. When the power light goes out, insert the LETTER PERFECT diskette into the drive, and close the door. Then turn the Atari computer on. After the usual "clicking and whirring" that occur as a program is loaded, the main menu will appear on the video screen.

There are two programs on the program diskette. Both sides will work in your computer, however, each side is designed to work with different printers. The front side marked, "Atari," is designed to work with an Atari 825 or Centronics 737/739

printer. The back side marked "EPSON" is designed to work with the "MX" series of EPSON printers. You should insert the side "UP" that corresponds to your type of printer.

III. MAIN MENU

If you have correctly loaded the program, the following information will appear on the screen of your video monitor:

FIGURE 1

```
                      MAIN MENU

CURRENT DRIVE NUMBER #1

   =>      EDITOR                <=
           CHANGE DRIVE #
           LOAD
           SAVE
           MERGE
           SCREEN FORMAT
           PRINTER
           LOCK
           UNLOCK
           DELETE
           FORMAT DISK
           DATA BASE MERGE
           QUIT

       PRESS [<] OR [>] TO MOVE CURSOR.
        PRESS [RETURN] FOR SELECTION.
```
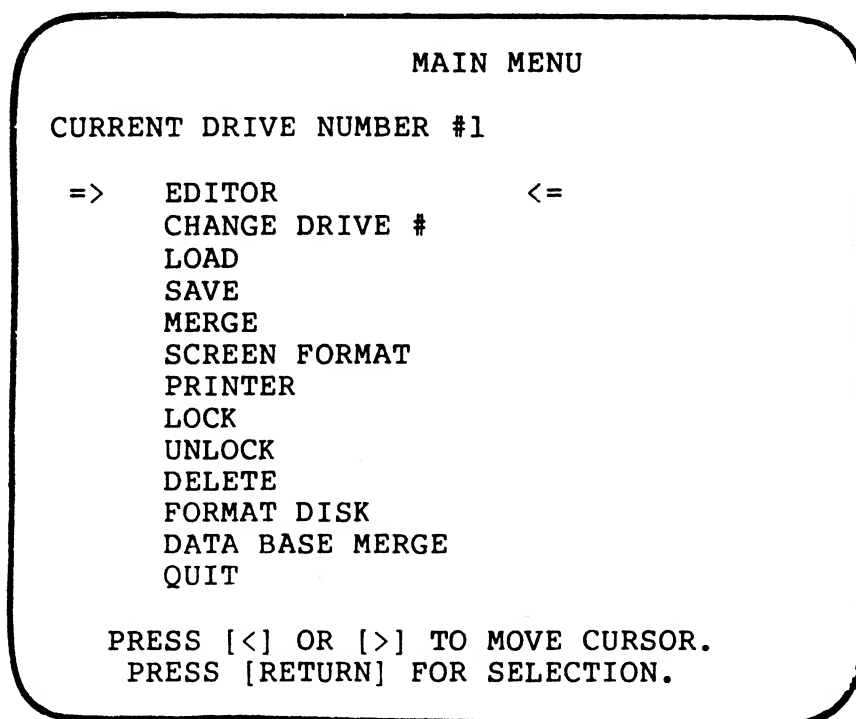
The screen now shows what will be referred to as the "main menu" throughout this manual. Like the menu in a restaurant, it provides a variety of selections at your command. In order to complete the order-taking process, move the arrows to the item you wish to select and press the [RETURN] key.

SELECTING FROM THE MAIN MENU is done by pressing either the "greater than" [>] key or the "less than" [<] key. These keys are the third and fourth from the right in the upper row. The [>] key moves the arrows down. One keystroke will move them down one space to "CHANGE DRIVE #"; six keystrokes will move them down six spaces to PRINTER. When you get to the last selection, QUIT, and press the key one more time, the arrows will return to the top selection. If you want to move in the opposite direction, press the [<] key. If the arrows are resting on the EDITOR selection and you press the [<] key, the arrows will move to the bottom selection, QUIT. Additional keystrokes will move the arrow up one selection at a time. Take a few minutes to play with these two keys to see how easy it is to move up or down from one selection to another on the main menu. By seeing how they function properly you will discover the ease of operation and how much time is saved.

DISK OPERATING SYSTEM - The disk operating system is sometimes referred to as the DOS by computer people. It is the way the computer addresses the disk drive system on your computer. LETTER PERFECT has a different DOS from the standard Atari diskette. For this reason you should not use diskettes initialized by the Atari master diskette as data diskettes with LETTER PERFECT. You should use the menu selection, FORMAT DISK, to initialize the data diskettes for LETTER PERFECT word processing. These data diskettes cannot be used to start up the system; they can only be used to store data files. We do not recommend using your program diskette as a file storage diskette. It should be used to load the program into your computer and then be put away. This special use of the DOS by LETTER PERFECT means that your system provides more storage

space on the diskettes and that your program will always work even if Atari should decide to make changes in the way their disk operating system operates.

ESCAPE - [ESC] - The [ESC] key is used as an exit function from many parts of the program. This key will be used principally to escape from the EDITOR. When you wish to leave the EDITOR, press the [ESC] key and you will then be returned to the main menu. Once in the main menu, move the arrows to the selection you desire. The [ESC] key is the farthest to the left in the top row and can be used in the following ways in this program:

1. To leave the EDITOR, always use an [ESC] keystroke. This will take you back to the main menu.

2. If you are doing a SCREEN FORMAT function from the main menu selection, you may abort this operation by using the [ESC] key, and you will be returned to the main menu.

3. When printing a text file, if you want to abort this operation for any reason, do so by pressing the [ESC] key, and you will be returned to the main menu. If you simply want to pause in the printing process, press the space bar. Press the space bar again to resume the printing where you left off. The [ESC] key differs in this respect; it aborts the operation and takes you back to the main menu of the program.

4. When initializing a new diskette, use the menu selection, FORMAT DISK. In this menu selection use the [ESC] key to abort the formatting operation. The message "INSERT DISKETTE, [ESC] TO ABORT" will appear on the video screen prior to the formatting operation.

5. Use the [ESC] key to abort the QUIT operation on the main menu. If you are in the main menu and hit return by mistake when the arrows are resting on the menu selection,

QUIT, you can return to the main menu and abort the QUIT operation by using the [ESC] key.

6. If you are using the [CTRL] [E] operation to move to the end of the text, you can abort the operation by using the [ESC] key. This will be particularly useful in long text files when you are going to the end of the text and see where you want to stop in the middle. If you press the [ESC] key, the cursor will be in the area of the text where you want it to be.

7. Use the [ESC] key to abort a continuous scroll operation. The continuous scroll allows you to see a line of text at a time and adjust the speed at which the text is scrolled. If you see an error and want to make a correction, you can by aborting the scrolling operation with the [ESC] key.

8. Use the [ESC] key to stop searches and replaces. If after finding the word you have searched for, you do not wish to search for other occurrences, use the [ESC] key. The cursor will remain at that position.

THE BREAK KEY - The break key in LETTER PERFECT has no special function and will perform the same function as the [RETURN] key.

ATARI KEY - The [ATARI] key has the Atari logo on it and is found next to the right shift key. This is a computer related key and changes the screen text to inverse when used for programming. This key is not used for LETTER PERFECT. Because the Atari computer keyboard is slightly different from a typewriter keyboard, the Atari key is sometimes struck accidentally instead of the right shift key. This will cause the program to have appeared to "lock up" and not function. The entire program will have "frozen" and all you will get when you strike a key is a bell sound, until you press the Atari key again. After using the Atari keyboard for a short while, you will become accustomed to this and will have no further problems.

FILES - A file is best described as the information that is typed on the screen which resides in the computer's memory. There are two kinds of files. Files in the computer's memory are working files. Files stored on magnetic diskettes are permanent files. When the word "text" is used in this manual, it will always be in the context of information that is being kept in the computer's memory. As you use the EDITOR, you will prepare letters and text for printing on your printer.

After you have finished preparing a file, you may want to save it on magnetic diskette. The method for doing this is simple. Figure 2 is an example of the disk directory with three stored files on it. Saving a file in the computer's memory by transferring it to the diskette is very simple. Exit the EDITOR by pressing the [ESC] key and return to the main menu. Using the [>] key, move the arrows down to the SAVE selection. At this point press the [RETURN] key, the disk drive will spin, and the following will appear on the screen:

FIGURE 2

```
                  DISK DIRECTORY

   FILENAME => _
  DISK DIRECTORY

  # COMM      LP 014      LETTER   LP 018
    TEST      LP 003

  628 SECTORS FREE
```
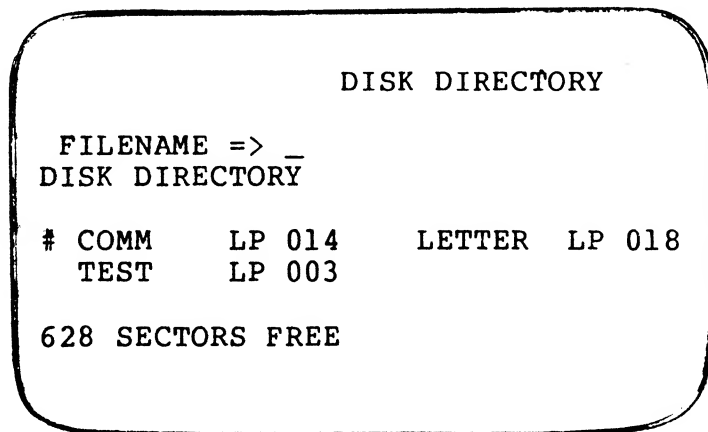
The cursor (white block) will appear following the arrow after "FILENAME =>." Type a name for the text you have prepared to

save it on the diskette. Pick a name that has meaning, but it should not be over eight characters in length. For example, in Figure 2, "COMM" has four characters in its name. LETTER PERFECT will supply the extension "LP" for you. All you have to type is the filename. The numbers after the filename tell how much space the file occupies on the diskette.   After typing the filename, press the [RETURN] key. Another line on the screen tells you how much space is free on the diskette; the line might read "628 SECTORS FREE." As the number approaches zero, the diskette is getting full, and you will know to prepare a new diskette. If the disk does not have room for the file that you have in memory, you will get the message "DISK FULL." and you will have to get a new data diskette. In this case the file in memory will not be lost. If you save the file, it will be saved in magnetic form on the diskette and will also remain in the computer's memory until it is erased or the computer is turned off. After saving the file, the program will return to the main menu.

If you change your mind and do not want to save the file, you can abort the operation by pressing the [RETURN] key when answering the filename question.

If you no longer want to save the file in memory, you can erase it in two ways. Loading a new file into memory will erase the old file. If you do not want to load a stored file but instead want to prepare a new file, return to the EDITOR selection on the main menu and press [RETURN]. The file you just saved will be on the screen with the cursor resting on the first character in the first line. A [CTRL] [X] will delete all text. (See section on DELETE ALL TEST.)

When a file is saved on diskette, it is packed. Packing means that all the spaces are removed and only the letters themselves are saved. The purpose of packing is to save space on the diskette and to utilize the diskette space for maximum storage capacity. You will never see this or know when it happens, but it is happening and is helping to get the greatest amount of material on your diskette.

THE MAIN MENU SELECTIONS are described briefly in this section. You should refer to the individual sections in this manual for a more detailed explanation.

> EDITOR - The EDITOR is where you enter and edit your text on the video screen. In addition to the normal characters, there are a number of functions and cursor controls available to you.
>
> CHANGE DRIVE # - This menu selection allows for the use of multiple drives. It is not necessary that you have more than one, but in the event that you do, you will be able to use this option.
>
> LOAD - Loading a file from the magnetic diskette is accomplished with this selection. Files that are saved on the diskette can be retrieved for editing and resaved. A complete explanation of loading a file will be found in a following section. A file that is locked will have the pound sign (#) preceding it. In FIGURE 2 the file, # COMM   LP 014, is locked. Notice it is the only locked file in this example.
>
> SAVE - This menu selection allows you to save a file for future reference. You will be able to save information under a name that you find easy to recall. If you save a file with a name that already exists, it will overwrite the old file unless that file has been locked. The saving of files will be explained in full later in the manual.
>
> MERGE - This function will allow you to merge a file on the diskette to the end of one that is already in

memory. In fact, you can merge many files into memory for editing and combining. The number of files is restricted only by the memory limitations of the computer itself.

SCREEN FORMAT - This menu selection allows you to see on the video screen how a piece of text that was prepared in the EDITOR will actually appear on the printed page. When you review prepared files, you will be able to note areas you want to change and go back to the EDITOR to change them. This will allow you to save time and, in reality, edit the final appearance of the text prior to actually printing it on your printer. You can slow down the speed of the scrolling by holding down the less than key [<]. If you want to speed up the scrolling, you can hold down the greater than key [>]. The longer you hold down this key, the faster and slower each will work.

PRINTER - When you select this entree from the main menu, you go to the printer on your computer and print the file in memory. Refer to the section on PRINTING A FILE for a detailed description of how to use this selection.

LOCK - The lock feature allows you to lock a file on the diskette and thus provides a fail-safe from it being destroyed or overwritten. This is a safety feature to protect important files you want to keep for longer periods.

UNLOCK - This allows you to unlock files that are locked. You do this to overwrite the old file with the newly edited file you want to save. The new file can then be locked for safekeeping.

DELETE - This menu selection is very straightforward. It removes the unwanted file from the diskette. This is a housekeeping selection which allows you to eliminate files that are no longer needed.

FORMAT DISK - The formatting of a disk is used to initialize an unused diskette for file storage purposes. New diskettes have no information on them and cannot store information until they have been initialized. This initialization process can be likened to sanding a board prior to staining it.

In this case the diskette must be prepared (initialized) by the computer. This menu selection allows you to prepare a blank diskette for receiving information. In addition, the diskette is prepared without a disk operating system. This means it will have additional storage space; however, it cannot be used to start up the computer disk drive. These diskettes should only be used for storing data files.

DATA BASE MERGE - The DATA BASE MERGE selection is used in merging data base files from LETTER PERFECT'S sister program, DATA PERFECT. This data base program can be used to create mailing lists and to do other data base type functions. This is explained in greater detail in a later section. See your local computer store if you want to know more about this program.

QUIT - The QUIT menu selection allows you to do just that, quit. This is a safe method of exiting the program. Any file in the EDITOR is lost if this function is performed. You should save all files on diskettes before quitting. To quit, place a diskette with the disk operating system on it in Drive 1 and press the [RETURN] key. The system will start up as if you had just turned on the system.

IV. EDITOR

ENTERING THE EDITOR - Place the arrows pointing toward EDITOR in the main menu and press the [RETURN] key. The screen will be blank with the exception of the white square that appears in the upper left-hand corner. This white square is called the cursor. The cursor marks your location. If you type an "a," it will appear on the screen where the cursor was.

If you type a word, press the space bar, and type another word, that is what will appear on the screen, i.e., two words with a space between them.

The EDITOR is where you prepare your text. If you just start typing as you would on a typewriter, you will see much the same type of letters, spaces, and typewritten form except that it will appear on the video screen instead of the paper in a typewriter. There are differences between the typewriter and the computer. These differences are not so much in the way things appear on the paper as in the way you physically cause them to happen. Everything that you do in the EDITOR will require some new technique. The results will be the same, but you will learn new ways to do them. This will not be hard, and after a few days of working with the system, you will find typing on a typewriter a difficult task as compared to using LETTER PERFECT.

THE VIDEO SCREEN - The video monitor that you are using for your computer will be the paper on which you prepare the text. It has one major difference from the paper. It is only 40 characters wide and 24 lines long. The paper you are going to place the prepared text on is 80 characters wide. The problem then arises of how the 40 character wide screen relates to the actual printed page. When you get to the end of a screen line, a word will move to the beginning of the next line if there is not enough room for it on that line. This is called parsing. Parsing allows for a clean appearance on the video screen, and words are not broken apart. This enables you to tell where spaces exist between words. The last word on any line will always have a space following it because of parsing. There is one exception to this. As you go about editing text, you will

from time to time insert spaces or characters in a given line. This insertion will move the entire line over the number of spaces that you inserted. This can cause a single word to be on both lines. Part of the word will be at the end of a line and the rest at the beginning of the next line. You can improve the way the page looks easily. The command to do this is [CTRL] [I]. As you do this, the screen will go blank momentarily, begin scrolling from beginning to end, and finally return to the beginning of the text. If you advance through the text, you will find that those spaces that were broken in appearance have now been returned to readable form. Anytime that you have been doing a lot of editing and the text becomes difficult to read, you may do the [CTRL] [I] command to improve the appearance of the text.

USING THE EDITOR - The Atari computer has a standard typing keyboard. It also has some other keys that allow you to do some special things. One special key is the [CTRL] key, which stands for the word "control." When you press any alpha key (i.e., a thru z), that character will appear on the screen. If you hold down the shift key and press any alpha character, you will get the per-case representation of that letter (i.e., A thru Z). If you hold down the [CTRL] key and press any alpha key, special things will happen. Instead of getting characters on the screen, you will be able to do some very special things. These [CTRL] functions will allow you to edit your text as you prepare it and to manipulate the text many different ways that you were never able to do with the typewriter. The command sheet for LETTER PERFECT on the following page lists what each [CTRL] key alpha key combination works. These commands will be explained in full on the following pages. The command sheet also exists as the file "COMM" on your program diskette. Anytime you want a

duplicate copy, you may print one by loading that file and printing it on your printer.

CAPS LOWR - [SHIFT LOCK] The [CAPS LOWR] key is used with LETTER PERFECT as a shift lock key. When you enter the EDITOR, you will be in lower case. To lock in upper case, hold down the [SHIFT] key and press the [CAPS LOWR] key. To go back into lower case you need only strike the [CAPS LOWR] key by itself. If you hold down the [CTRL] key and press the [CAPS LOWR] key, you will lock the [CTRL] key in the same manner and will get [CTRL] functions with each keystroke until you release the [CTRL] lock function by pressing the [CAPS LOWR] key.

COMMANDS PAGE

KEY	FUNCTION	KEY	FUNCTION
CTRL A	GO TO BEGINNING OF LINE	CTRL V	SPECIAL PRINT CHARACTERS
CTRL B	BOLDFACE ON/OFF	CTRL W	DELETE ALL BEFORE CURSOR
CTRL C	CENTER NEXT LINE	CTRL X	DELETE ALL TEXT
CTRL D	DELIMITING CHARACTER	CTRL Y	DELETE ALL AFTER CURSOR
CTRL E	(END) GO TO END OF TEXT	CTRL Z	GO TO END OF LINE
CTRL F	FORMAT LINE	CAPS LOWR	SHIFT LOCK/RELEASE
CTRL G	FOOTER	ESC	EXIT EDITOR
CTRL H	HEADER	CTRL Y	MOVE CURSOR UP
CTRL I	IMPROVE TEXT	CTRL V	MOVE CURSOR DOWN
CTRL J	(JOIN) ADD TO BUFFER	CTRL <-	MOVE CURSOR TO LEFT
CTRL K	(KILL) DELETE BUFFER	CTRL ->	MOVE CURSOR TO RIGHT
CTRL L	(LIFT) INSERT FROM BUFFER	[RETURN]	INSERT CARRIAGE RETURN
CTRL M	MOVE TO BUFFER	sft-DEL	DELETE NEXT LINE
CTRL N	(NEXT) DELETE NEXT BLOCK	sft-INS	INSERT LINE AT CURSOR
CTRL O	(ON,ON,) CONTINUOUS SCROLL	CTRL TAB	CLEAR TAB AT CURSOR
CTRL P	FORCED END OF PAGE	sft-TAB	SET TAB AT CURSOR
CTRL Q	SCROLL ONE PAGE FORWARD	CTRL DEL	DELETE A CHARACTER
CTRL R	(REPLACE) SEARCH AND REPLACE	CTRL INS	INSERT A CHARACTER
CTRL S	(SEARCH) SEARCH ONLY	sft-CLEAR	GO TO BEGINNING OF TEXT
CTRL T	(TOP) GO TO TOP OF SCREEN	DEL	DELETE LAST CHARACTER
CTRL U	UNDERLINE ON/OFF	TAB	TAB TO NEXT TAB STOP

SPECIAL PRINT CHARACTERS

*	SUBSCRIPT	$n	PRINT STRING n
^	SUPERSCRIPT	#n	PRINT NUMBER n

FORMAT REPRESENTATIONS		DEFAULT VALUES	
d	default values	d	(no number needed)
r	reset standard	r	(no number needed)
t	top margin	t	5 spaces
m	left margin	m	10 spaces
j	justification	j	1 (justfy)
w	set line width	w	64 characters
l	line spacing	l	1 (single spacing)
p	printed lines/page	p	56 lines
s	stop / go to top of next page	s	0 (no stop)
f	set type font	f	0 (10 cpi)
a	margin adjust	a	0 (no adjust)
b	bottom margin	b	5 spaces
n	set page number	n	0 (not printed)
h	set header spacing	h	4 lines above text
z	set footer spacing	z	4 lines below text

FORCED CARRIAGE RETURNS - At this point, you are ready to prepare your letter. You may type just as you do on a typewriter, using the shift key for capital letters and the number keys in the top row for numbers. At the end of the screen line you do not throw the carriage as you would with a typewriter, but rather you just continue typing. When your file is printed, it will issue the carriage returns when it gets to the end of the line. However, you will want to issue carriage returns, for example, when you want an extra line between sections of text like between paragraphs. To cause this blank line to appear, press the [RETURN] key. This will cause a less than [<] arrow in inverse printing (black in a white box) to indicate that you have placed a forced carriage return. An inserted carriage return will force the printer to stop printing at the point where it is encountered, the same as a manual carriage return on a typewriter. If it encounters another [RETURN] on the next line, it will again do a carriage return without printing on that line. It will print what follows in the text.

CURSOR MOVEMENT - As you type the text, you will see errors that you have made, and you will want to correct misspelled words and add or delete words or lines. To move around on the video screen, you must move the cursor to the position where you want to edit the text. The cursor can be moved in four directions: up, down, right, and left. The four keys to move the cursor must be used with the [CTRL] key and are on the right-hand side of the keyboard in the second and third rows.

> UP   To move the cursor up a space, use the up cursor key, which is the second to the left of the [RETURN] key. You will see an inverse arrow (black arrow on white square)

on the upper left-hand side of this key. If
you want to move the cursor up two lines in
the text, hold down the [CTRL] key and press
the up cursor key two times. If you fail to
use the [CTRL] key and just press the up
cursor key, a dash (-) will appear at the
position where the cursor had been located.
If you use the [SHIFT] key instead of the
[CTRL] key, you will have an underline (_)
where the cursor had been. To move the
cursor in any direction, you must hold down
the [CTRL] key before pressing another key
for the direction you want to move the
cursor.

DOWN To move the cursor down, use the down cursor
key, which is next to the [RETURN] key on
the right-hand side of the keyboard. You
must hold down the [CTRL] key while pressing
the down cursor key in order to move the
cursor down one line. If you press this key
by itself, you will get the equal (=) sign.
If you press the key while holding down the
[SHIFT] key, you will get a vertical bar
(|). It is important that you hold down the
[CTRL] key when you press this key in order
to move the cursor down. This combination
will move the cursor down one line for each
time you press the down cursor key.

LEFT To move the cursor to the left, use the left
cursor key. This key must be pressed while
holding the [CTRL] key down in order to move
the cursor to the left. If you press this
key alone, you will get a plus (+) sign at
the cursor location. Pressing the key while
holding the [SHIFT] key down will give a
backslash (\). Pressing the left cursor key
twice while holding the [CTRL] key down will
move the cursor two spaces to the left.
Holding down both the [CTRL] key and the
left cursor key will cause the cursor to
move rapidly to the left.

RIGHT To move the cursor to the right, you should
use the right cursor key (located to the
right of the left cursor key). You must

hold down the [CTRL] key while pressing this key in order to move the cursor to the right. Pressing the right cursor key without holding down any other key will cause an asterisk (*) to be printed at the cursor location. Holding the [SHIFT] key down during the pressing of this key will cause a power (^) symbol to be printed.

DELETE LAST CHARACTER - If you press an incorrect key and want to backspace to correct the letter, you can do this quite easily. The [DELETE BACK'S] is the second key from the right in the top row. For example, if you type "lettet," you can back space that one space immediately and retype over the "t" by using the delete backspace key and retyping the correct letter. Anytime that you mistype, you may back space at that moment and retype the correct letter. The nice thing about this is that you do not have to get out the eraser and erase the incorrect letter; just retype it. Editing is that easy with LETTER PERFECT.

GO TO BEGINNING OF THE LINE - You can move the cursor automatically to the beginning of the same line by holding down the [CTRL] key and pressing the [A] key. This is faster than using the back cursor key repeatedly. An easy way to remember the command is that "A" is the beginning of the alphabet and [CTRL] [A] will move the cursor to the beginning of the line.

GO TO END OF THE LINE - [CTRL] [Z] will move the cursor from any position on the printed line to the last character of that line. An easy way to remember this command is that "Z." is at the end of the alphabet and a [CTRL] [Z] will move the cursor to the end of the line. If you are typing on the last line of a text and perform this command, the cursor will move only to the end of

the line. If the line ends in the middle of the page, it will stop there. It will not go to the extreme right-hand side of the screen.

GO TO BEGINNING OF THE TEXT - You can move the cursor to the beginning of the text you are working on with one command. You simply hold down the [SHIFT] and [CTRL] keys and press the [CLEAR] key. The [CLEAR] key is the shift position of the less than [<] key. When you do this, the cursor will return to the beginning of the text. If you press the [CLEAR] key without holding down the shift key, you will get the less than (<) character at the cursor location. It is important to note that this command will move the cursor to the beginning of the text, not just the top of the screen page. If it is on the screen page that is also the top of the text, it will go to the beginning of the text and top of the screen page at the same time.

GO TO TOP OF SCREEN - The top of the screen is the left-most word on the first line of the screen page. Regardless of where the cursor is located, if you do the [CTRL] [T] command, it will move to the top left-hand corner of the screen text that you are editing. This command allows you to move quickly to what is commonly called the "home" position. It can be remembered easily because of "T" for "top." Every attempt has been made in the control commands to make the mnemonics for the commands as meaningful as possible.

GO TO END OF THE TEXT - To move to the end of the text quickly, hold down the [CTRL] key and press the [E] key. The command is easy to remember because the word "end" starts with the letter "E." The end of the text should not be confused with the end of

the video screen. If the video screen shows the last page of the text file, the cursor will move to the end of the video screen as well as the end of the text file. This command is handy for adding information to the end of a long text because you can go directly to the end without going through a lengthy file.

SCROLL ONE PAGE FORWARD - Scrolling can be compared with turning a page in a book. In the case of the computer video screen it means turning to the next screen page. If you are looking for a particular section of text on the video screen, you can scroll a page at a time to look for it by holding down the [CTRL] key and pressing the [Q] key. If the cursor is on the first line of a screen page, it will move to the last line and last character on that same page. If it is in the middle of the screen page, it will go to the middle of the next screen page. It is still possible to view some of the information from the preceding page. Each time you press the [Q] key while holding down the [CTRL] key, the cursor will move forward one page. If the cursor is at the end of the text and can advance no further, it will remain where it is.

SCROLL ONE PAGE BACKWARD - There is no direct way to scroll backward one page. However, it is possible to scroll backward by using two different commands in the proper order. First move the cursor to the top of the page with the [CTRL] [T] command. Once it is at the top of the screen, do the [CTRL] key up cursor key commands to move up one line of text. After these two commands, the page will scroll backward one page and the cursor will be resting on the bottom line of the preceding page.

If you want to go backward one more page, repeat the above steps. This may seem awkward at first, but it will become automatic in a short time.

CONTINUOUS SCROLL- Continuous scroll means that the text scrolls a character at a time from the cursor position. If the cursor is at the beginning of the text, hold down the [CTRL] key and press the [O] key to begin the scrolling process. You can slow down the scrolling by holding down the less than [<] key. The longer you hold down this key, the slower the scrolling will become until it is scrolling at an easy speed for you to read. If during this process you decide to stop the scrolling, press the space bar. To resume the scrolling, strike the space bar again. If you want to speed up the scrolling, hold down the greater than [<] key. The longer you hold this key down, the faster the characters will scroll. At the end of the text the cursor will stop. Scrolling is a convenient way to proofread your text. If during the continuous scroll process you see an error that you want to correct, stop the scrolling by using the [ESC] key. The cursor will be resting on the last character that was printed. You can correct the error and resume the continuous scrolling from that point by typing [CTRL] [O]. If you see another error, stop with the [ESC] key, edit the error, and resume the process until you have finished.

DELETE A CHARACTER - The ability to delete a single character is an important feature of LETTER PERFECT. Take the example of a misspelled word such as "lettter." You do not have to retype the entire line to remove the unwanted "t." To delete the "t," move the cursor to the "t" and do the character delete procedure. With the cursor resting on the "t," hold down the [CTRL] key and press the [DEL] key. The delete key is the

second from the right on the top row of keys. To delete a character is just that simple.

You can use the search and replace function, which is explained in a later section of the manual, to locate a misspelled word.

INSERT A CHARACTER - The ability to insert a character is opposite in function to deleting a character. If, for example, you type "leter" and leave out one "t," you can use the insert a character function to place the "t" in the proper place. Move the cursor to the "t," hold down the [CTRL] key and press the [INS] key. The insert key is the third key from the right in the top row of characters. After you insert the space, type the letter (in this case "t") that was left out when you first typed the word. If you want to insert more than one character, press the [INS] key the same number of times as the number of characters you want to insert. This ability to insert characters allows you to edit a single word without the trouble of retyping whole lines or an entire block of text.

DELETE A LINE - The ability to delete an entire line is also a feature of LETTER PERFECT. As you are reading some text that you have written, you may decide to remove an entire line. Place the cursor at the beginning of the line that you want to delete, hold down the [SHIFT] key, press the [DEL] key, and the entire line will then be gone. If the cursor is in the middle of a line when you perform this function, the part of the line after the cursor will be deleted. You can delete more than one line by repeating this procedure.

INSERT A LINE - If, in editing some text, you decide to add one or more lines, this can be done with the insert a line feature.

Place the cursor just prior to where you want the line inserted, hold down the [SHIFT] key, and press the [INS] key. After doing this, all of the text after the cursor will move down one line, and you can type in the desired addition. If more than one line is needed, repeat the procedure. In the case of a long text, there can be as much as a five-second delay before the blank line is inserted, particularly when you are near the beginning. The reason for the delay is that you are moving the entire section of text down one line. If the file is 15 pages in length and you insert a line on the third page, 12 pages of text will have to move down one line. A five-second delay is minimal when you consider the amount of text being moved.

SEARCH - The ability to search for a particular word or series of words is very useful. The word "string" should be explained here in order to better understand the search feature. A string is a character, a series of characters, or a series of characters and spaces. For example, the word "letter" is a six-character string. The words "Letter Perfect" are a 14-character string because you must count the space between the two words as a character even though it is not a printed character. To begin the search feature, hold down the [CTRL] key and press the [S] key. When you do this, you will be prompted with the sound of a bell, and the following will appear in the upper left corner of the video screen: " SEARCH STRING =>_." You should type in the string (word or series of words) that you want to find and press the [RETURN] key. If you do the [CTRL] [S] command and decide to abort the operation, press the [RETURN] key and you will find the cursor at the position in the text where it was prior to your initiating the search feature. You can search out entire lines, multiple words, numbers, or single characters. You can search out format lines or strings

within format lines. It is important that the cursor is positioned before the string you are searching for in the text. If you try to search for strings that are positioned before the cursor in the text, it will not find them because it can only search for strings that are past the cursor position. Remember also that you must use upper-case characters if they are a part of the string you are searching for. Once you have typed the string, the text scrolls forward and the cursor finds the string, you can do one of two things. If it is not the string you are looking for (i.e., the string occurs more than once in the text), press any key except the [ESC] key and the search will continue for the string in a later part of the text. If it is the section you are looking for, press the [ESC] key in order to stop the search. If you forget to press the [ESC] key when you find the string you are searching for, the search will continue until you do the [ESC] command to quit the search.

SEARCH AND REPLACE - The search and replace feature is a very useful feature of LETTER PERFECT. This feature allows you to search out a particular string and replace it with a different string. An understanding of the word "string" is important for you to use this feature. A string is a character, a series of characters, or a series of characters and spaces. The word "letter" is a six character string because it has six characters. The words "letter perfect" are a fourteen character string because you must count the space between the two words as a character even though it not a printed character. To start the search and replace into action you must do the following. Hold down the [CTRL] key and press the [R] key. You will have a bell sound and the following will appear in the upper left corner of the video screen: SEARCH STRING =>_. The cursor will be resting after the arrow. Type in the string that you wish to

search for just the same as you would in the section on search and press the [RETURN] key. After pressing the [RETURN] key you will again be prompted with the bell and a new message will appear in the upper left hand corner of the video screen. That message will read: REPLACE WITH =>_. The cursor will again be following the arrow. Type in the new string you want to replace the one that you are searching for and press the [RETURN] key. The cursor will move to the search string. The cursor will be resting on the first character of the string. If you press any key except the [ESC] key the program will replace the search string with the replace string and continue to look for other occurrences of the search string. If you do not want to continue the search and replace press the [ESC] key. It is important that you use the [ESC] key after finding the string that you looking for. The search and replace is a handy way to look for words that might be misspelled throughout the length of the text. If for example you have the bad habit of spelling the word receive "recieve", you can search and replace all occurrences of the misspelled word. You can make a list of words that you commonly misspell and do a search and replace for each of them to make sure that you have the correct spelling throughout the text. Remember that you can search for long strings. For example you can search for a string such as "The first, second, and fifth pages were incorrect" and replace it with the string "The first, third and fourth pages were correct". These are both valid search and replace strings.

SPEED CONTROL - At various times during the use of your program you may find it necessary to change the scrolling speed on your video monitor. This can be necessary when scrolling, i.e. under command, or during such menu operations as SCREEN FORMAT. You can slow down the speed of the scrolling, by pressing the less

than key [<]. The more times you press this key or hold it down, the slower the scrolling will become until it is moving at a speed that is easy for you to read. If during this process you decide to pause the scrolling, press the space bar. To resume scrolling press the space bar again. If you want to speed up the scrolling, you can press the greater than key [>]. The longer you hold down this key, the faster the characters will scroll until the cursor is at the end of the text, where it will stop.

IMPROVE TEXT - The improve text feature allows you to justify the video screen. When you edit you will cause the text to be pushed around. As you type text words that are too long to be placed on a line they are parsed to the next line. Because of this you know there is always a space after each word at the end of a line. However, as you edit the text this may change. As you insert and delete characters you may find that you cause a single word to be partly at the end of one line and partly at the beginning of the next line. After you have edited a text for a period of time you may find the text difficult to read. To correct this use the improve text feature. To use this hold down the [CTRL] key and press the [I] key. The screen will turn blank, go to the beginning of the text, and quickly scroll through the entire text, and go back to the top of the text. As you advanced through the text you will find that all of the words have been reparsed. The words that do not fit on the end of a line will be put at the beginning of the next line. This will enable you to read the text with ease. The improve text feature is just a tool for you to use to make your text more readable after you have made a series of editing commands.

UNDERLINING - The underline feature allows you to do just that, i.e. underline sections of text. The underline is initiated by holding down the [CTRL] key and pressing the [U] key. Do this prior to the section that you want underlined. After turning on the underline with the [CTRL] [U] type the word or section that you want underlined. After you have finished that section you will want to turn the underline off. If you do not turn it off it will continue to underline the text. Turn the underline off in exactly the same way that you turned it on. Hold down the [CTRL] key and press the [U] key. The underline key is a toggle command because the command that turns the underlining on also turns it off. If you want to underline the word "IMPORTANT" type [CTRL] [U] IMPORTANT [CTRL] [U]. It is just that easy.

CENTERING

The centering of a line is an easy task to perform. To center a line hold down the [CTRL] key and press the [C] key. You will not use centering within the body of a sentence. You use centering in header lines, footer lines, and any line that will stand alone by itself. This can be used to set off a particular section of a text file. The word "CENTERING" that precedes this section was centered as an example of centering of a section that is not a header or footer. The words "LETTER PERFECT" that are at the top of each page in this manual were centered with the centering feature. Anyone that has had to count the number of characters to be centered, subtracted the number from the total spaces in the page width, divided this result by two, move ed the tab over that number of spaces, and then typed the title will appreciate this easy method of centering. The centering feature can be used in another very special way. For example to block a date from the right justified margin is something that

is typically done in a business letter. This can be done by using the centering command twice, and typing the date. Following is an example of how this is done:

CC December 16, 1980 [RETURN]

In the above example the underlined characters are control characters. The two [CTRL] [C]'s tell the program to block this date with the right hand margin which is justified. With this feature you are able to justify the date line with the right margin. The following example is how this date line would appear justified with this manual:

December 16, 1980

As you can see the date line is justified with the right hand margin.

BOLDFACE - The boldface feature appears as expanded print with the Atari 825 printer. Because it is expanded you cannot use it within the middle of a line as it will overprint the lines above and below it. The boldface can be used in headers, footers, and as titles before a certain section. To turn the boldface (expanded print with the ATARI 825) on hold down the [CTRL] key and press the [B] key. Anything after this will be printed in the expanded print. Boldfaced print can also be centered in the same way that is explained in the preceding section. It is important to put the boldfaced command before the centering command. Do the [CTRL] [B] first, then the [CTRL] [C], the following section will be boldfaced and centered. You do not have to turn the boldface or centering command off as the carriage [RETURN] will automatically turn them off.

HEADERS - The "LETTER PERFECT" at the top of each page in this manual was printed using a header line. The header is typed only once in the body of the text file. In the case of the header "LETTER PERFECT" it was typed at the beginning of the file and because it is a header it is printed on each page. Headers can contain any information, they can even be used to number the page if you want your page numbering at the top of the form. To enter a header hold down the [CTRL] key and press the [H] key. An inverse "H" will be typed. You will then type the information you want in the header line. If you want the header centered use the [CTRL] [C] key code immediately following the [CTRL] [H] and before you type the desired information. If you want the header to be a page number you would use the shift eight [@] character in the header line. Following is an example of the way a typical header line appears if used for the header "LETTER PERFECT":

<u>HC</u>LETTER PERFECT [RETURN]

The underlined "H" and "C" in the above example indicate that they are control characters. If you want use the.header as a page number you can do it and start the numbering with "1" automatically. This would appear as follows:

<u>HC</u> - @ - [RETURN]

The underlined "H" and "C" indicate control characters. The printed header will appear centered and look like this: - 1 -. If for some reason you want to start with a number other than the number "1", you can do this also. For example you may want to start with page number "10" in the manual you are printing. Do the header line the same, but use a format line to indicate

the number you want to start the numbering sequence. An example
of this follows:

                    HC - @ - [RETURN]
                    F n9 [RETURN]

The underlined characters are control characters. In the above
example the header line tells the program you want a centered
header that will be a number. The format line that follows
tells the number preceding the number you want to start the
numbering sequence. If you had typed "n10" you would begin with
number "11" on the header line. It is important to remember
that you use the next smaller number than the one you want to
start with in the numbering procedure.

There is one more very useful thing you can do with headers when
you use them for numbering at the top of the page. You have the
ability to block the number with the right justified margin of
the text. You do this by using the command [CTRL] [C] twice
after the header command and block page numbering is done
automatically. Following is an example of this:

                    HCC - @ - [RETURN]
                    F n1 [RETURN]

All underlined characters are control characters. The "H"
indicates you want a header. The double [CTRL] [C] indicates
you want the number on the right hand margin. The format line
tells the program to start the numbering with the number "2".

FOOTER - A footer line is much the same thing as a header line
except that it always occurs at the bottom of the page. A

footer line can be used to do the same things that the header
line does. In the case of this manual the footer line was used
to print the page numbers. In the case of the footer line which
is a page number, it is typed at the beginning of the file and
because it is a footer, it is printed on each of the following
pages. Footers can contain any information, but they are
usually used to number the page. To enter a footer hold down
the [CTRL] key and press the [G] key. You will have an inverse
"G" on the screen. You will then type the information you want
in the footer line. If you want the footer centered you would
use the [CTRL] [C] key code immediately following the [CTRL] [G]
and before you type the desired information. If you want the
footer to be a page number use the shift [@] eight character in
the footer line. Following is an example of the way a typical
footer line would appear if it were used for a page number

<u>GC</u> - @ - [RETURN]

The underlined "G" and "C" indicate control characters. The
printed footer will appear centered and look like this: - 1 -.
If for some reason you want to start with a number other than
the number "1" you can do this also. For example if you want to
start with page number "10" in the manual you are printing do
the footer line the same, but use a format line to indicate the
number you want to start the numbering sequence on. An example
of this follows:

<u>GC</u> - @ - [RETURN]
<u>F</u> n9 [RETURN]

The underlined characters are control characters. In the above
example the footer line tells the program you want a centered

footer that will be a number. The format line that follows tells the number preceding the number you want to start the numbering sequence. If you had typed "nl0" you would have begun with number "11" on the footer line. It is important to remember that you use the next smaller number than the one you want to start with in the numbering procedure.

There is one more very useful thing you can do with footers when you use them for numbering at the bottom of the page. You have the ability to block the number with the right justified margin of the text. You do this by using the command [CTRL] [C] <u>twice</u> after the footer command and this is done automatically. Following is an example:

<u>GCC</u> - @ - [RETURN]
<u>F</u> nl [RETURN]

All underlined characters are control characters. The "G" indicates you want a footer. The double [CTRL] [C] indicates you want the number on the right hand margin. The format line tells the program to start the numbering with the number "2". The numbers will appear on the bottom of the page in the right hand corner and will be justified with the right hand margin. Following is an example of how this would look:

- 2 -

DELIMITING CHARACTER - The delimiting character is used as a marker for doing special operations such as block movement, buffer operations, and block deletions. These different operations will be explained in the next few pages, but it is important that you understand the delimiter character and how it

works prior to the understanding of these operations. The delimiter should be thought of as a finish line in a race. In a race you have the starting line and the finish line. All that lies between the two would be the race itself. In this program you will use the cursor as the starting line in the race and you will use the delimiting character as the finish line in the race. The delimiter (finish line) is placed at the point where you want to stop certain operations, i.e. block movement, buffer operations, and block deletions. The cursor will be placed where you want to start the operation. You know how to move the cursor around for the beginning point from which you want to start. To draw the finish line (delimiter) you move the cursor to that point where you want the operation to finish and place the delimiter character by holding down the [CTRL] key and pressing the [D] key. The delimiting character will appear as an inverse "D" on the video screen. Remember that inverse means that it will be a black "D" on a white block. The placing of the delimiting character is an easy operation. To use the delimiting character is explained in the next sections.

DELETE NEXT BLOCK - If you type a letter and decide that you want to remove a whole paragraph you will use this feature. You can delete a line at a time, but that is a slow process and requires several repetitive actions. The easy way to do it is to use the DELETE NEXT BLOCK function.

The program has to know just how much you want to delete so you must tell it where to finish with the delimiter character. Move the cursor to the end of the paragraph you want deleted and place the delimiter character at that point. The commands for placing the delimiting character are [CTRL] [D]. That is all there is to it. Move the cursor back to the beginning of the

paragraph that you want to delete and do the following. Place the cursor on the first character of the paragraph that you want to delete, hold down the [CTRL] key, and press the [N] key. The following message will appear at the top of the page: "PRESS "#" TO DELETE =>_". This is a fail-safe feature in case you change your mind. If you do change your mind you press any key and you will be returned to your previous cursor position. If you want to complete the delete block operation do the [SHIFT] [3] operation and the deletion will occur. The screen will go momentarily blank, begin scrolling from the beginning of the text to the end, and place the first page of the text file on the video screen. As you move down through the text you will find that the paragraph you want to delete is gone. You have deleted the block desired. What happens if you try to do a delete next block operation and forget to place a delimiter? If you do this you will have all the operations go as if you have a delimiter in place including the message to "PRESS "#" TO DELETE_". When you do the [SHIFT] [3] operation the message "NO DELIMITER" will appear in the top left hand corner of the screen. Press any key and the cursor will be moved back to the position in the text where you were before you started the operation. You will have to place the delimiter where you want the block deletion to stop and repeat the procedure.

MOVE TO BUFFER - The buffer is a special space in the computer's memory that is reserved for text. The buffer is used when you want to move blocks of text from one part of the text to another part of the text. If you want to move a paragraph to the end of a letter from its position in the beginning you will use this feature. This will be much easier than deleting the paragraph and retyping it where you want it placed.

It is also a very fast way to edit, change, and move whole blocks of information around.

The program has to know just how much you want to move so you must tell it where to stop with the delimiter character. Move the cursor to the end of the paragraph that you want moved and place the delimiter character at that point. The commands for placing the delimiting character are [CTRL] [D]. That is all there is to it. Move the cursor back to the beginning of the paragraph that you want to move and do the following. Place the cursor on the first character of the paragraph that you want to move, hold down the [CTRL] key, and press the [M] key. The information will be moved to the buffer and you can go on with the INSERT FROM BUFFER operation to place the paragraph in the buffer in the proper place. You should read the section on inserting from the buffer to learn how to perform this operation. It is explained in a following section.

The buffer will hold 2048 bytes of packed text. Packed text is text with all of the nulls removed. The text is packed so that you can get the maximum amount of text in the buffer. The buffer will hold about two screen pages of information on your forty character by twenty four line video screen. This is about one page of printed text. If you attempt to place more information in the buffer than there is room available it will pick up all that it can and leave the rest where it is in the text. You can now move the buffer information to the place that you want to insert it in the text, do the insert operation, go back to pick up the remaining text, and move it in a second move to buffer operation. It is nice to know that no information will be lost.

If you try to move information to the buffer and get the message "BUFFER FULL" the move to buffer operation will be automatically aborted. You have to either delete the buffer information (see section on DELETE BUFFER) or move the buffer to where you want it in the text. If you do not know what is in the buffer it is best to move to the end of the text and place the information there. If the information is not needed you can delete it. If the information is important you can move it back to the buffer and place it where you want it. If you delete the buffer without looking to see what is in it you may delete some important information.

There is also a fail-safe built into the buffer operation regarding leaving the editor. If you had finished the text and were going to go out and print the file you would exit the editor by using the [ESC] key. If you had information in the buffer you would not be able to do this and you would get the error message: "BUFFER IN USE!" at the top of the screen. You have to either delete the buffer or move the buffer information into the text in order to exit the editor. This fail safe-feature is just another way that we try to provide the maximum protection of your text files.

INSERT FROM BUFFER - Information that is in the buffer is being held in a special section of the computer's memory. While this information is in this memory storage location the rest of the program works normally. If you move information into the buffer, you will not immediately have to move it out of the buffer before you can do anything else with the program. The buffer is a storage place. You can store information in the buffer until you decide to leave the editor for any reason. If you attempt to leave without doing something with the buffer

information you will get the message "BUFFER IN USE!" and you will not be allowed to exit the editor. You can do two things. You can "INSERT FROM THE BUFFER" which inserts the buffer information back into the text. You can also delete the buffer or erase the buffer's memory. We will talk about deleting the buffer in the following section.

To insert information from the buffer into the text requires two key strokes. While you are holding down the [CTRL] key press the [L] key. This is mnemonically easy to remember as [L] "LIFT" the buffer information from memory and deposit it into the text. The only question remaining is where do you want to insert the buffer information into the text? This is no problem. Move the cursor to the position in the text file where you want the information to start. Do the [CTRL] [L] key strokes and the information will be moved from the buffer into the text starting at the point in the text where the cursor had been located. When you perform this operation, the screen will go blank momentarily, and come to rest on the first page of the text file. When you move to that section where you made the insertion you will find the information in place.

DELETE BUFFER - If you have information in the buffer there are two things you can do with it. If you do not move it back into the text as described in the previous section you will have to erase it from the buffer's memory. You will not be able to exit the editor to save a file, print a file, or anything unless you have no information in the buffer. This is a safety device so that you don't lose any of your text. If you do not want the information that is in the buffer you may delete it in the following manner. Hold down the [CTRL] key and press the [K] key. This is an easy command to remember. You "KILL" [K] the

buffer with the [CTRL] [K] key strokes. When you do these commands the following message will appear at the top of the screen: "PRESS "#" TO DELETE =>_. This is also a safety device. You must hold down the [SHIFT] key and press the [3] key in order to complete the buffer delete operation. If you press any other key except the shift key the buffer delete operation will be aborted. If you press the shift key nothing will happen as it is waiting for you to press the "3" key. To abort you press any key except the shift key and the cursor position will be on the first line of the screen text. You can then move it to where you want to make your next editing operation.

ADD TO BUFFER - The add to buffer operation is used to add information in the text to the buffer when information already exists in the buffer. The information that is added to the buffer is always added at the end of the present buffer information. You can add information into the buffer until you have filled the buffer. If you try to add more information to the buffer than it can hold you will get the error message: "BUFFER FULL!". The add to buffer operation is aborted. You can use this operation to put blocks of information together or to join one, two, or three sentences that you want in a particular order. You can place them in the proper place at one time as opposed to moving one at a time. This will make it easier for you. To join information in the text with information already in the buffer do as follows: Hold down the [CTRL] key and press the [J] key. This command is easy to remember because of the [J] "JOIN" mnemonics. Like any other buffer operation you have to use a delimiter to tell the program just where you want to stop the picking up of information that you want to join to the buffer information. If you do not

understand the use of the delimiter read that section in the manual. As in the moving of any information to the buffer the cursor will be the starting point and the delimiter will be the ending point.

TABS - As with the typewriter you may set tabs with the computer. When you load the program you have default tabs already set for you. The default tabs are every five spaces. When you press the tab key you will tab over five spaces. As you hold down the [TAB] key you will tab over five spaces with each key stroke. To go slowly you should not hold down the key, but press it once for each five spaces you want to TAB. If you space over two spaces with the space bar and do a [TAB] you move just three spaces to the tab set location. This is the same as it is with a typewriter. If you have information typed in a line and want to move over to the tab position to do some editing you can do so, but all information on the line will be erased and will have to be retyped. This should be no problem since you have the ability to move from beginning to end of the line and from end to beginning of the line with the [CTRL] [Z] and the [CTRL] [A] commands respectively. You will also find that you can move rapidly to the middle of a line with the forward copy function. You also have the search function which will move you to a position when you don't really know exactly where the location is. The TAB key will be used for tabbing and not for cursor movement in the text. If you change the tab stops as is explained in the following sections the TAB key will continue to operate as you would expect. It will move only to the set TAB stops.

CLEARING A TAB STOP - You may want to change the tab stops so that you may do columnar work. This can be done with ease.

Place the cursor on each of the tab stops that you want eliminated, hold down the [CTRL] key, and press the [TAB] key. You have to repeat this operation for each location of the default tabs that you want to eliminate. The easiest way to accomplish this is to start at the beginning of a line and do a TAB operation followed by a [CTRL] [TAB] to clear the tab stop at that location. Repeat this procedure as you continue across the screen until you had cleared all of the tabs. The clearing of a tab stop is as easy as just holding down the [CTRL] key and pressing the [TAB] key. You have to have the cursor on the tab position for this to occur.

SETTING A TAB STOP - If you want to set a tab stop other than the default tab or if you want to clear all tabs and set just two tabs for column work you can do this easily. Delete all tabs as explained in the previous section and then move the cursor to the position where you want the tab. Hold down the [SHIFT] key and press the [TAB] key. You now have a tab stop at the position where the cursor was resting. Move the cursor to the next position where you want a tab stop and repeat the process. During the course of your typing the text when you press the TAB key you will move to those tab stops. The setting of the tab stops with the computer is just that easy. To automatically reset the default tabs you just exit and reenter the editor by typing [ESC] and [RETURN].

DELETE ALL TEXT - To delete the entire text file that you are working on you can use the delete all text command. You may want to do this for several reasons. Like any writer you may find that the entire text is just not worth keeping or printing and you want to start over. Instead of wadding the paper up and throwing it at the trash can you can use the delete all text.

Another reason to have this command is to start a new text file after you have printed and saved on magnetic diskette the file in memory. The text file in memory can be printed or it can be saved. Once you have finished the file and you want to save it, exit the editor by pressing the [ESC] key. As you do this you will find yourself back at the main key. Using the greater than [>] key move down to the SAVE on the menu selection go through the step necessary to save a file. After the file has been saved you will be back on the main menu. If you want to go back to the editor and prepare another letter use the less than [<] key to move back to the EDITOR selection. After pressing the [RETURN] key as instructed you will find that the file you have just saved was still in memory in the editor. The computer will do nothing until you tell it to do so. It does not know you do not want to start another file until you tell it so. You can use the DELETE ALL TEXT command to do just this. To delete a file hold down the [CTRL] key and press the [X] key. A bell will ring and the following message will appear at the top of the screen: PRESS "#" TO DELETE =>_. This is a safety feature to insure you against accidentally destroying a file. For example if you meant to center a line and hit the "C" which lies next to the "X" the safety message instructs you to hold down the [SHIFT] key and press the [3] key for the "#" sign. After you do this the entire screen will be blank and the cursor will be resting on the upper left hand corner of the video screen. If you decide your command to DELETE ALL TEXT is a mistake you can abort the operation by pressing any key except the [SHIFT] key. The shift key will not work because it is waiting for you to press the "3" after it to delete the file. If you press the "3" key without holding down the [SHIFT] key the operation will be aborted and the cursor will be resting at the position you had left it prior to starting the delete all text procedure.

DELETE ALL AFTER CURSOR - To delete part of a file use this command. This is a very straightforward command in that you delete all that lies after the cursor location. All of the text that lies after that cursor position will be erased. To delete the part of a file after the cursor location hold down the [CTRL] key and press the [Y] key. A bell will ring and the following message will appear at the top of the screen: PRESS "#" TO DELETE =>_. This is a safety feature to insure your against accidentally destroying all that lies after the cursor location.   An example will be if you meant to go to the top of the screen and pressed the "T" which lies next to the "Y", the safety message instructs you to hold down the [SHIFT] key and press the [3] key for the "#" sign. After you do this all that lies after the cursor will be gone. If you decide your command to DELETE ALL AFTER THE CURSOR is a mistake, you can abort the operation by pressing any key except the [SHIFT] key. The shift key will not work because it is waiting for you to press the "3" after it to delete all after the cursor. If you press the "3" key without holding down the [SHIFT] key the operation will be aborted and the cursor will be resting at the position you left it prior to starting the delete all after cursor procedure.

DELETE ALL BEFORE THE CURSOR - To delete part of a file use this command. This is a very straightforward command.   All of the text that lies before that cursor position will be erased. To delete the part of a file before the cursor location hold down the [CTRL] key and press the [W] key. A bell will ring and the following message will appear at the top of the screen: PRESS "#" TO DELETE =>_. This is a safety feature to insure you against accidentally destroying all that lies before the cursor location.   An example will be if you meant to do a search and

replace and pressed the "W" which lies near to the "R" key then the safety message instructs you to hold down the [SHIFT] key and press the [3] key for the "#" sign. After you do this all that lies before the cursor will be gone. If you decide your command to DELETE ALL AFTER THE CURSOR is a mistake, abort the operation by pressing any key except the [SHIFT] key. The shift key will not work because it is waiting for you to press the "3" after it to delete all before the cursor. If you press the "3" key without holding down the [SHIFT] key the operation will be aborted and the cursor will be resting at the position you left it prior to starting the delete all before cursor procedure.

EXIT THE EDITOR - To exit the editor use the [ESC] key. The editor is where you write your text files. You may want to exit the editor for several reasons. Most of the time you will want to leave so that you can print the file in memory. You may be leaving to save the file or to merge another file to the file in memory. Whatever the reason just press the [ESC] key and you will be back at the main menu of the program. You will not be able to leave the editor if you have information in the buffer. If this is the case you will get a bell and the error message "BUFFER IN USE!_". If this occurs you have to delete the buffer or move it back into the file in memory before you can exit the editor with the [ESC] key. The text file does not have to be in any complete form for you to exit the editor and print it. You can print what is in the file if it is two lines or twenty lines. The only restriction in exiting the Editor is you have no information in the buffer. For a more complete discussion of buffer operations read that section of this manual.

FORMAT LINE - The format line is explained in detail in the next major section of this manual. You should read that section

for a complete explanation of the format line. For this section is sufficient to say that the format line is never printed but is used to instruct the program as to your desires regarding the appearance of the printed file. In it you will be able to change margins, line spacing and the like. The commands to create a format line are: Hold down the [CTRL] key and press the [F] key. An inverse "F" will appear on the video screen. An inverse "F" is a black "F" in the white square. After typing the format line you can use several lower case letters, upper case letters, and numbers to instruct the program as to your desires regarding the finished appearance of the text file. Read the section of the manual on FORMATS to get a detailed explanation of the use of the format line.

SPECIAL PRINT CHARACTERS - The special print characters will allow you to do several things. It will allow you to send direct control characters to your printer, perform superscripting and subscripting with your printer and it will also allow you to use the DATA BASE MERGE menu selection with LETTER PERFECT'S sister program DATA PERFECT. Let us discuss these two different features in detail.

ESCAPE CODES -   You may use special print characters to address special characteristics of your printer. Different printers have different capabilities that are outlined in their manuals. This manual will tell you how to address these characters, with this program, but will not go through the codes for each different printer.   To address these special functions, use the same sequence of keystrokes that you used for special print characters. Hold down the [CTRL] and press the [V] key, which will give you the inverse "V". You would then follow the special print character with the number in decimal that causes

the printer to do what you want. To send an [ESCAPE] you need only press the [ESCAPE] key. You may also hold down the [CTRL] and [SHIFT] keys and press the [P] key to send this command. (You should see the ASCII decimal, keystroke, conversion chart at the end of this manual.)

If you wanted to send "ESC 4" to the printer you would have to break up the command into two parts. First, you would send the "ESC" as in the above explanation. Secondly, you would send the "4" followed by the special print command. The sequence would look as follows on the video screen: V V4. You should note that nothing shows after the first "V." The "ESC" could also be sent as an [CTRL] [SHIFT] [P] and in this case nothing would show on the video screen and it might be hard later to know what was at that position. If you want you may also send the message CHR$4, it could be done with the following key combination allowed from the Atari keyboard. [CTRL] [V] followed by a [CTRL] [D] and then entering text as you normally would.

In the appendix of this manual is a reference chart that shows you the Hex, decimal, and key combination values for easy conversion from one to the other.

This may seem confusing to the casual reader. What must be kept in mind is that the printer receives coded messages from the computer. To send these codes, the program has to follow a set series of steps in order for the printer to receive them correctly. Look at your printer manual in order to see what different codes toggle different features of your particular printer. You should keep in mind that anything you tell the printer to do will continue until you tell it to do something different, or until a "hard" carriage return is encountered. If

you have turned on a special characteristic of your printer, it will continue this characteristic until it is turned off or until it finds a [CR] as it would at the end of a paragraph. If you want the characteristic to continue in the next paragraph you must repeat the sequence that initiated the changes.

1. Superscripts are index marks that are written above a character, as in a^3, B^{12}, and C^{n+1}. A superscript can be either a letter, a number, or a combination of the two that are placed above the character it follows. Superscripts are typically used in footnotes and in scientific notation. You have the ability to use superscripts and subscripts with LETTER PERFECT and yovr Atari 825 printer.

2. Subscripts are index marks that are written below a character as in H_2O, the chemical formula for water. Subscripts do not necessarily have to be numbers. They can be letters, numbers, or combinations of the two.

It should be noted that superscripting and subscripting are a function of the printer and not this program. While this program supports these functions they cannot make a printer do them if the machine itself will not. The Epson printer does not allow for backing up and therefore does not support these features.

SUPERSCRIPTING AND SUBSCRIPTING - The superscripting and subscripting are used with the special print character. The commands for these functions are as follows. Hold down the [CTRL] key, press the [V] key and an inverse "V"(black "V" on a white block) will appear on your video screen. A trick for remembering this command will be "VERY SPECIAL PRINT" and the letter "V" for "VERY". Once you have the inverse "V" you can do either a superscript or a subscript depending on which character you place after the inverse "V". If you place a power sign [^], the character printed after it will be placed up a half space above the line for a superscript. The power sign is achieved by holding down the [SHIFT] key and pressing the asterisk [*]

key. The asterisk key is the second key from the right on the second row of keys next to the caps-lowr key. After placing the power sign [^] for the superscript type what you want superscripted. If it is a number "1" just type "1". You have to move the printer head back down one half space to the original line position to continue your printing. If you fail to do so it will continue printing everything on the superscript line one half of a space up. To move the printer head down use the subscripting command. Hold down the [CTRL] key, press the [V] key, and follow the inverse "V" on the video screen with with an asterisk [*]. The asterisk requires no [CTRL] or [SHIFT] key to be held down, but is accomplished by pressing the key next to the CAPS-LOWR key. This will bring the printer head down one half space to the original line. To use the superscripting and subscripting commands to print a chemical formula such as water reverse the process from above. Following is an explanation of how to type the formula for water.

1. Type the letter "H" leaving no space after it.

2. Hold down the [CTRL] key and press the [V] key. This will give you an inverse "V" at the cursor location after the letter "H". Do not put a space after the inverse "V".

3. Press the asterisk [*] key. This is the command to move down one half space.

4. Type the number "2" after the asterisk [*].

5. Hold down the [CTRL] key and type the letter [V]. Do not leave a space after the inverse "V".

6. Hold down the [SHIFT] key and press the asterisk [*] key for the power symbol [^]

> which will be located just after the
> inverse "V".

   7.   Type the letter "O" after the power
>   symbol.

This is what happened in the above example. In step #1 you typed the first letter of the formula for water. In step #2 you gave the special print character command which told the program to pay attention to the character following the special print character command. In step #3 the special command was an asterisk [*] which told the the program to move the print head down one half space. In step #4 the number "2" was typed at the subscripted position. In step #5 the command was given for a special print character to be watched for by the program. In step #6 the power symbol [^] told the program to move up one half space to the original line. In step #7 the letter "O" was printed to complete the chemical formula. It must be remembered that the program has to be told each step in the order you want it to occur when you work with superscripting and subscripting. The program will do exactly as you tell it. If you move the line down one half space for subscripting it will stay down until you tell it to come back up one half space.

DATA BASE MERGE - The DATA BASE MERGE is also addressed via the special print characters. There are two other special print characters that are used with this feature. They are the the pound sign [#] and the dollar sign [$]. These functions are printed on the video screen by using the [SHIFT 3] and the [SHIFT 4] keys respectively. You will have to prefix the use of the "$" and the "#" with the [CTRL] [V] key, as you will in superscripting and subscripting. Once you do this you can use any number that you prefer after the pound sign and the dollar sign. The data base merge is set up so that as you develop your

own data base you will be able to assign string and number values as you desire and it will make sense. Lets use a typical example of how you may want to use the program to print a mailing list. Following is a list of the possible ways that you might assign number and data relationship as you set up your data base in the sister program of LETTER PERFECT, DATA PERFECT.

DATA BASE FIELD FOR MAILING LIST

```
.1    LAST NAME
 2    FIRST NAME
 3    MIDDLE INITIAL
 4    COMPANY NAME
 5    STREET ADDRESS
 6    CITY
 7    STATE
 8    ZIP CODE
```

This is a fairly common example of the types of information that you may want in a mailing list of a letter you were going to send out to selected customers. As you type the letter the form might look like the following:

```
1                        LJK ENTERPRISES INC.
2                          P.O. BOX 10827
3                 ·     ST. LOUIS, MISSOURI 63129
4
5
6
7                                         January 1, 1982
8
9
10 V$2 V$1
11 V$4
12 V$5
13 V$6, V$7   V$8
14
15 Dear Mr. V$1:
16
17 It has been brought to our attention.....................
```

This is the first seventeen lines of a typical business letter. Lines one through three are the letter head of the company. Line seven is the date line. Lines ten, eleven, twelve, and thirteen are the addressee. Let's examine each line.

LINE 10 - The underlined characters are control characters. The first character is the letter "V" for special print characters. The "$" designates that you want to print a string. The string will have been established in DATA PERFECT, in this case the string "2" is the first name of the individual. Following in line ten is the [CTRL] [V] $1. The "1" in the data base stands for the last name of the individual. Line ten prints the first and last names of the individual the letter is being sent to.

LINE 11 - The "V" stands for special print character and the "$4" string is the name of the company. If there is no company name this line can be left out.

LINE 12 - The string that is represented by the number "5" is the street address. In this case it is telling the program to pull the string "5" from the data base and print it on this line.

LINE 13 - This line prints the City, Street, and Zip Code of the addressee. The city is represented by the string "$6", the state is represented by the string "$7", and the zip code is represented by the string "$8". You should notice the spaces that have been placed after the comma and within the body of the text. This will allow for proper spacing in the body of the text when the letter is printed.

LINE 15 - Line fifteen is the salutation. The Mr. has been typed and is filled in with the string "$1" which is the last name of the individual to whom the letter is being sent.

After you type the letter you can exit the editor by using the [ESC] key and move to the DATA BASE MERGE on the main menu. After pressing the [RETURN] key you will be instructed to follow the instructions for the Data Base Manager program. These questions will be on the video screen. There is a series of questions that will help you to merge with the data base that will have been created with the sister program DATA PERFECT. Part of these questions allow you to search and sort your data base so you can be selective in picking the people to whom you want to send the letter. After this process it will pick up the correct names, place them in the correct place, and allow you to send out personalized form type letters.

NUMBERS IN A DATA BASE - The use of numbers such as dollar amounts is also allowed in the data base merge feature of this program. The use of numbers are also accessed via the use of the special print character. Hold down the [CTRL] key and press the [V] key to get an inverse "V" on the screen. Use the [SHIFT] [3] combination in order to get the pound symbol [#] after the inverse "V" to use the number feature. As in the string field you will want to set up a field for different number representation that you want inserted after the "#" symbol. If you want to put the number within the body of a letter you can do this. Consider the following example:

                    Data Base:
          1 Monthly payment
          2 Most recent payment
          3 Balance due on account

This may well be the type of data base that you will want to establish for the keeping of account information. You can establish this data base by following the directions in the program DATA PERFECT. You can type the following information in the body of a letter and have it printed from the data base merge selection of the established data base.

         Would you please send us the monthly payment of $10?
         This will reduce your balance to $390.00.

You will accomplish the above by typing the following in the body of the text as you prepare it.

         "Would you please send us the monthly payment of $V#1?
         This will reduce your balance to $V#3.

The underlined characters are control characters. Please note there are no extra spaces printed between the dollar sign and the dollar amount as obtained from the data base. The program will take out and delete all unnecessary spaces so as to make for a correct spacing in the printing of dollar amounts. When you are using numbers in the body of a letter as in the above example use the pound [#] symbol after the [CTRL] [V]. The above example is how you may want to use numbers within the body of a letter itself.

If you want to do columnar work use strings. Consider the following data base and you will see how this information can be printed within the body of a letter so you may do columnar work.

Data Base:
1 Previous Balance
2 Purchases last month
3 Payments received
4 Balance on account

This is typical of the type of information that you might want to enter in columnar form in a letter. Consider the following letter with the information from the data base material listed above.

Our records show the following payments and purchases
for the past month.
          Previous Balance $ 5,000.00
          Payment Received $ 500.00
          Purchases $ 1,000.00

          Balance Due $ 5,500.00

This information will be entered in the body of the letter. It will be entered in string fashion instead of number fashion because you want the decimal points to line up. Following is an illustration of how this information should be entered.

Our records show the following payments and purchases
for the past month.
          Previous Balance V 1<
          Payment Received V 3<
          Purchases   · V 2<
                           ------<
          Balance Due V 4<

This is what happened in the above example. The data base values of 1,2,3 and 4 were entered with the special print characters. The underlined letters are control characters. It is important you notice that the special print character "$" is used instead of the "#". This is done because the work is columnar and you want the decimal points to line up. You use the "#" sign for numbers written within the body of a line only. The program will take care of placing the decimal point in

correct place as long as you place the data base value in the columnar form. The entering of the values themselves is done in the data base program and you will be instructed in that manual how to go about entering that information. When the information is printed it will be in the columnar form.

You will be allowed to use any size number that you wish. You can use either $5.00 or $5,000.00 and the program will handle them. The spaces preceding the number and the dollar sign for the different amounts will be accounted for so as to have a neat looking text. You will not have a lot of extra spaces. All you enter in the LETTER PERFECT program will be the representations that have been established in the data base. When you go to the data base merge menu selection it will pull the appropriate information out of the data files and enter it in the appropriate place in the body of the letter. The fields can be set up in many different ways and this information will be explained in the manual that comes with that program. You will go about setting up the fields and then just type the fields that you want to merge in the body of the letter (with LETTER PERFECT) using the special print character, the [#] number symbol or dollar [$] symbol, and then the field number that you have established for that value in the data base program.

The setting of fields is done in the program DATA PERFECT. This section explains the way that the data base merge files are addressed in this program. To be able to use the data base merge you have to get that program. You can then define the fields and merge with LETTER PERFECT via the special print characters to do all of the above.

VI. FORMATS - FORMATTING A LETTER

An understanding of what a format line does is necessary to get the greatest use of LETTER PERFECT. The FORMAT line is the way you tell the computer how you want the letter to appear on the printed page. Since you have no margin stops to set, you will tell the computer what margins you want in format lines. You will also tell it other things about how you want the final printed letter to appear. You will tell it: where you want the top margin, the left margin, how many spaces between printed lines, the number of lines per page, the width of the line (right margin) and other important things. We will discuss each of these in detail on the following pages and you may refer to them as questions arise.

FAILURE TO SET A FORMAT line will not damage the program. It will have no noticeable result on the final printed page. This is because if you fail to set specific formats then the program sets the formats for you. These are called DEFAULT FORMATS. You may find these default formats (FIG. 3) quite useful for the standard form letter. If you want a different appearance in the look of your final copy, other than the one the default values provided, then you must manually set the formats to those of of your choosing. The values for the default values can be found in FIGURE 3.

DEFAULT VALUES - The default value [d] option in the format line allows you to set default values back to their standard value as outlined in FIGURE 3. without changing some very important things. The page numbering option would remain in effect as well as the page header and page footer. This gives you greater flexibility in editing. There are many time when you are

preparing a book or report and want to keep headers, and footers
(that could include page numbering) intact but change the body
of the text. If you wanted to change the margins and page width
to block a particular section then you could do so. You would
then default back to the values (Fig. 3.) without affecting your
page numbering or eliminating your header. If you had indicated
a reset standard function you would override all previous
formats established. You would clear the headers and footers.
If you want a better explanation of what the RESET STANDARD
function does then read the following section.

FIGURE 3.

FORMAT REPRESENTATIONS		EPSON DEFAULT VALUES	
d	default values	d	(no number needed)
r	reset standard	r	(no number needed)
t	top margin	t	5 spaces
m	left margin	m	10 spaces
j	justification	j	1 (justify)
w	set line width	w	64 characters
l	line spacing	l	1 (single spacing)
p	printed lines/page	p	56 lines
s	stop	s	0 (no stop)
f	set type font	f	0 (10 cpi)
a	margin adjust	a	0 (no adjust)
b	bottom margin	b	5 spaces
n	set page number	n	0 (not printed)

RESET STANDARD - The reset standard [r] command allows you set
the formats back to their default value as listed in FIGURE 3.
above. This format setting differs from the lower case "d" for
DEFAULT VALUE in one major way . That major difference is the
reason for the two single but different settings. The reset
standard sets every format back to their orginal value. This
means that if you have previously set the header line, footer
line, or page numbering in a previous line then they would not
be in effect. A page numbering function that had been

established and was keeping track of the page number for you would not be in effect. Also headers would no longer be printed and footers would not be printed after this command was given. The program would then act as if it were given no special format functions at all. If you had previously had a double line spacing it would now be set back to single line spacing. This has the advantage of allowing you to completely eliminate all previously written format lines and allow you to get to standard formats without having to change each item selectively. This gives you greater flexibility in writing your letter and changing the program. The preceding paragraph explains the default values in detail.

NON-DEFAULT FORMATS - To set other than the DEFAULT FORMATS you must first hold down the [CTRL] and then the [F] key. You would do this when you want to change the printed output from the default values. You will be rewarded with a black capital "F" in a white box. You then have the option of typing either upper case letters, lower case letters, or numbers after the lower case letters with the exception of "d" and "r". In the next few paragraphs each of these functions will be described for greater understanding.

LOWER CASE LETTERS - There are a few special lower case letters (see FIGURE 3.) that allow you to do important things. These lower case characters allow you to change from the default values and therefore change the blocking and printed appearance of the printed letter. These lower case characters and the way they can be used to change the default values are described in the following section.

d   The lower case "d" for default values sets all format
     values back to their default values (FIGURE 3). It does
     this with the exception that it does not clear headers and
     footers. The "d" does not require a number after it.

r   The lower case "r" also never require a number after it.
     The reset standard does more than the default values. It
     sets all the default values to zero and in addition it
     eliminates headers and footers. Page numbering is set to
     zero also (FIGURE 3.).

t   You could change the top margin from the default value of 5
     by stroking the "t" followed by any different value than 5.
     You would use this to change the top blocking according to
     your needs and way that you wanted the form to look.

m   You could change the left margin from the default 10 spaces
     by using the "m" followed by any different number. When
     you change the margin you will generally change the line
     width also. The line width is what changes the right
     margin. The left margin can be changed for your individual
     needs.

j   The justification could be turned off by putting a "0"
     after the lower case "j". Justification blocks the text on
     the right margin. When you do not want this affect then
     you would turn it off. In this explanation the
     justification was turned off by placing £j0< in a format
     line just prior to the section. It was turned on by
     placing a £j1< in a Format line following the section, the
     "1" indicating a "yes" for justification.

w   The lower case "w" can be changed from the default value of
     "64" by just entering a different number. The "w"
     represents the line width. When you shorten (use smaller
     than 64) the line width you move the right margin in.
     When you increase the line width then you move the right
     margin to the right.

l   The "l" sets the line spacing. To have double spacing you
     would put a "2" after the "l". Triple spacing would be
     accomplished with a "3."

p   The lower case "p" can be used to change the printed lines
     per page from their default setting of "56". You would
     type the number of lines per page you wanted after the "p".

s   The "s" is default for "0". By entering a "1" you will
cause the printer to stop printing at the end of the page.
You would then be prompted to hit the [RETURN] to continue
the printing process. This is handy to use when you are
using sheet paper and want to stop the printer at the end
of the form so that you may add another sheet of paper.

f   The lower case "f" stands for "font". The default value
for "f" is "0"(10 characters per inch). If you entered a
"1" after the "f" you would change the type font to
condensed print of 16.7 characters per inch.

a   The lower case "a" allows you to adjust the margin. This
is default to "0" and you may enter any number you wish to
adjust the margin after the "a". This is particularly
useful in using a numbered listing and is explained in full
in the section on adjusted margins. The section that you
are now reading uses this technique with the lower case
letters being used instead of numbers.

b   The bottom margin defaults to "5" spaces. Using the "b"
and any other number would change this bottom margin to
move up the number of spaces corresponding to the number
typed.

n   The lower case "n" is used for page numbering in
conjunction with headers and footers. The computer is
always counting the number of pages even if you do not have
them printed. You can have them printed by putting a "@"
(at sign) in a header or footer line. When this command is
placed at the beginning of the text you will start with the
number "1" because the default of "n" is 0. If you wanted
to start numbering with a different number you could do
this. If you wanted to start on page 9, then you would put
the "@" sign in the header or footer (header for number at
top of page and footer for number at the bottom of the
page) and place the lower case "n" followed by the number
"8" in a format line. This would cause the first number on
the page to be "9".

UPPER CASE LETTERS can be typed as nonprinted commenting lines.
Anything you type in the uppercase in the FORMAT line will never
appear on the printed page when you print your file. Why do you
want this commenting function then? It's a great way to put
notes within a file for later reference. You will not

necessarily be making carbon copies of your letters and this is a great way to leave notes in the body of the letter that may help you remember the intent of the letter six months later. By typing: [CTRL] [F] THIS IS THE THIRD COLLECTION LETTER WE HAVE SENT FOR THIS CUSTOMER [RETURN]. You would have a nonprinted comment line in the body of a letter. When you printed the letter it would never show in the body of the letter and would be stored on the diskette for future reference when you SAVED the letter in a file.

MULTIPLE FORMAT LINES - It is not necessary to establish the formats for the entire text that you are preparing on the first line of the text. While you may want to do this, it does not mean that you cannot change one or more format functions during the course of your editing. This is the great advantage of word processing and LETTER PERFECT. This means that you can change the body and appearance of the final printed document during the writing and editing of the text that you are preparing. You might want to go from double spacing to single spacing. To do this you would have to do only one format function. You would have to type [CTRL] [F]11[RETURN] and continue to type the section that you wanted single spaced. After you had typed the section that you wanted single spaced and then wanted to return to double spacing then you could do this by typing [CTRL] [F] 12 [RETURN] which would tell the program that you now wanted double spacing. You could accomplish this with any of the other format functions as well. You could change one, two or more different format functions at one time and return to to original formats by changing any or all of them at the point that you want the printed text to appear different. It would be typical in a single letter to have one format line at the top of the text that you were

preparing but it would not be necessary. In the longer of text, i.e. a book or report it would be typical to have different format lines thoughout the body of the text. Following is an example of a section of a short letter and an illustration of how mixed format lines are used. Following that is an explanation of what each line does in the text. The [CTRL] characters are underlined and the [RETURNS] are indicated by less than symbols (<).

1 <

2 Fml7wl06flsl<

3 CCJanuary 1, 1981<

4 <

5 <

6 Mr. John Doe<

7 123 Main Street<

8 Anywhere, USA<

9 <

10 Dear Mr. Doe<

11 <

12 This is an example of how we do formatting with our program
   LETTER PERFECT. As you can see we can set multiple format
   lines within the body of the text by placing format lines in
   various places. Following is an example of just how we go
   about doing this.<

17 <
18 Fm34w89ll<
              This line as you can see has the
              margins, line width (right margin) and
              line spacing changed in the middle of
              this letter.
22 Fml7wl06<
23 I hope that this example was helpful in showing you how you
   can change the format lines anywhere in the text.

This is what happened:

Line# 1   You entered a [RETURN]. You must do this when you enter the editor, and you want to change the font to the condensed print for the letter. We change the font on line two of the video screen.

Line# 2   You enter the format line. [CTRL] [F] indicates it is a format line and the 'F' will appear inverse (black on white). The small 'm' sets the left margin to 17 because you are using condensed print. The lower case 'w' sets the line width to 106 spaces. The lower case 'f' indicates you want the condensed print, and the lower case 's' tells the program to stop the printer at the end of the page after printing the file.

Line# 3   Here you blocked the date line to the right margin with a double [CTRL] [C] command.

Line# 4 and #5 are carriage [RETURNS].

Line# 6,7,8 You just typed in the address of the person to whom the letter was being sent.

Line# 9 [RETURN]

Line# 10 The salutation of the letter.

Line# 12 -16 This is the first paragraph of the letter.

Line# 17 [RETURN]

Line# 18 This is a second format line within the body of the text. In it we have done the following. The left margin (m34) has been changed to 34 spaces and the line width (w89) has been changed to 89 spaces. This has set the right margin in the same number of spaces as the left margin. Line spacing has been changed to single spacing with the 'll' command.

Line# 19,20,21,22 This is printed text that resulted from changing the format line in line # 18. The line spacing is single and the left and right margins have been indented.

Line# 22   Here we have changed the format line again to the
            original values with the exception of the line
            spacing. The left margin was changed back to 17
            spaces (ml7) and the line width (right margin) was
            changed to 'ml06'. Because we did not indicate
            otherwise the line spacing was left at single spacing.

Because of the lower case 's' in the format line of Line # 2
when the text were printed it would stop at the end of the last
line and wait for you to change the paper and hit [RETURN].

FONTS - The use of different type fonts is accomplished with
the use of the lower case 'f' for 'font' in the format line.
Some special things should be said about type fonts. There are
two different type fonts that are used on most typewriters: Pica
and Elite. Pica type is 10 characters per inch. Elite is 12
characters per inch. With your Atari 825 printer your standard
default type font is 12 characters per inch or what would be
pica type. With the Atari 825 this is called the proportional
font. This is a default value and you have to do nothing
special to have it. If you would want to use the condensed
print that is available for the Atari 825 then you would use the
format line with the lower case 'f' in it followed by a '1'.
The commands would be: Hold down the [CTRL] key and then stroke
the [F] key. This will give you an inverse 'F' on the video
screen. After the inverse 'F' you would want to type the lower
case 'f' followed by the number '1'. You would then press
[RETURN]. The lower case 'f1' will tell the program to start
printing in the condensed print and it will continue until you
instruct it to go back to regular print with a 'f0' in the
format line prior to where you want the normal print to start.

IMPORTANT ! If you desire to type a letter in condensed print you would have to tell the program immediately upon entering the editor. You cannot put this format instruction in the first line of the editor.

The type font for condensed print is 16.7 characters per inch. This will mean that the default setting for margins and line width will not be centered in the page if you use this type font for a letter. You will then have to manually change the format appearance by using the format line. The left margin would be seventeen to be the same as the default margin and the page width would be 106. You would do the following then to set the page for condensed print upon entering the editor:

1. Press the return key. You must do this before font changes only when the font line is set in the first line of a text file.

2. Hold down the [CTRL] key and then press the [F] key. This will give you an inverse 'F' on the video screen.

3. Type a lower case 'f' followed by a 'l', type a lower case 'm' followed by a 17, type a lower case 'w' followed by a '106' and then press [RETURN].

4. The following is the way that your format line should appear: Ff1ml7w106<. The underlined letter is a control character. The less than symbol stands for [RETURN].

EPSON PRINTER - The fonts for the Epson printer are different than for the Atari. The default font is 10 cpi, font 1 is the 16.7 cpi, font 2 is the enhanced font, and font 3 is the enhanced double strike. Only font 1 has a different cpi, the other are all 10 cpi. You will have to make the same margin adjustments for font 1 with the Epson as you did in the explaination of condensed fonts for the Atari printer above. If you have the GRAFTRAX option with your Epson printer you will have the additional italicized font which is turned on with the superscript command and turned off with the subscript command.

TOP MARGIN - As indicated in Figure 3, the top margin for the Atari printer is five spaces. This is the default top margin if no format is indicated when you enter the EDITOR, and it is also the value to which the program returns if you use reset standard "r" or default values "d." When you go to the printer for a copy of what you have in the EDITOR, the printer will go down five spaces from the top of the form to begin printing the first line of the file you have in the EDITOR. If you want more than five spaces, you will have to change this with a format line. If, for example, you want 10 spaces, you will have to type [CTRL] [F] t10 [RETURN]. The [CTRL] [F] will set the format line, and the "t" will indicate to the program you want to change the top margin. Unless you change the format, all subsequent pages will also have the top margin of 10 spaces.

LEFT MARGIN - The proportional font of the Atari 825 and Centronics 737/739 printers is the default font in this program. The left margin defaults to 12 spaces. This will be the case if no format line is used (automatic formatting), if reset standard "r" is used, or if default value "d" is indicated. When the file in memory is printed, the printing for the body of the text will begin at 12 spaces from the left side of the paper unless you change it by telling the program that you want a different left margin. If you want a 20-space left margin, do the following: [CTRL] [F] m20 [RETURN] just before you want the margin to switch to 20 spaces. At the end of the section you switched to 20 spaces, you can go back to the default setting of 12 spaces in one of several ways. The most direct is to type [CTRL] [F] m12[RETURN]. If you use the [CTRL] [F] r [RETURN] or the [CTRL] [F] d [RETURN] format function, you will return to the margin of 12, but you will also change all of the previous format functions back to their default values (Figure 3). In

the case of reset standard you will also clear the header, footer and page numbering. If the left margin is the only thing you want to change, the most direct operation is to change just that selection back to its original value. The computer, unlike a typewriter, does not have a right margin setting. This setting is controlled by the use of a line width setting which will be explained in the following section.

LINE WIDTH - The line width is important in that it determines the right margin. With the Atari 825 and Centronics 737/739 printers you have the additional luxury of proportional spacing. The proportional font of these printers is the default font in this program. If you change the left margin, you will have to change the page width in order to change the right margin. At first this may seem confusing, but it is really quite easy. What you take from the left, you must also take from the right in order to center the typing on the page. If you move the left margin in from 12 spaces to 18, you must also move the right margin in to center the text. You move the right margin in by taking away the same number of spaces from the line width that you did for the left margin (6 + 6 = 12). The line will be 12 spaces shorter, and the right margin will, therefore, be moved in six spaces, the same number that you changed it on the left. To shorten the line width 12 spaces, do the following: [CTRL] [F] w66 [RETURN]. Since the default setting for line width is 78 spaces, if you subtract six spaces from each side of the line (78 - 12 = 66), you have the line width that will move the right margin in six spaces. Play with this feature for a few minutes. Try changing the margins on the same letter in different places, and you will find out how easy it can be.

PAGE LENGTH - The page length has a default setting of 56 line spaces. When you print a file, the printer will default to five lines from the top of the paper and start printing 56 lines. You must remember that blank lines are counted among these 56 lines as well as lines that may have only a single word on them. Once the 56 lines have been printed, the printer will go to the next page and continue printing five lines down from the top. Headers and footers also must be counted, so it is important to keep this in mind if you use them in lengthy text. Another good point to remember is that double and triple spaces must be considered in counting the length of the printed page. If you want to change the form or style of the text, you must take all things into consideration. You can change the length of the text by using the format line. To change to an 8-1/2" x 14" legal form, you need to add enough spaces for three additional inches. Eighteen lines (six lines per inch) will cover the additional three inches of the legal form. You will need to add the two line amounts (56 + 18 = 74) and change the format line to reflect the paper length. The new format will be accomplished by [CTRL] [F] p74 [RETURN]. After you type this format line at the top of the file, it will direct the printer to type 74 lines before going to the top of the next form.

If you want to direct the printer to start a new page (i.e., between major sections of a document), simply type [CTRL] [P] on the next line below the place in the text where you want the break to occur.

JUSTIFICATION - The computer is different from the typewriter in that it will make allowances in what you type and justify each line on the right side, meaning that every line ends at just the same space on the right margin. The words are spread out

over the length of the line so that all the spaces between words are equal and there are no gaps in the printed lines. This is one of the tedious tasks that LETTER PERFECT does for you. The manual that you are now reading is right-hand justified. As you can see, every line ends on the same space at the right margin of the paper. The old problem of having to add spaces and push words together to achieve this effect is solved by the computer. It has the capability of counting very quickly and then sending the message to the printer in order to achieve this effect. The proportional font, condensed font (Font 1), and pica font (Font 2) are all right justified as a default value. Boldface or expanded print can be used within the body of a line without regard to other fonts also appearing in that line. Right justification will remain in effect.

Since justification is a default setting, unless you tell the program different, it will always justify the line. Why wouldn't you want a letter justified? There are some situations where you wouldn't and for good reasons. If you do not want the person receiving a letter to know it was prepared by a computer, you may not want it justified. If you are making a chart or form and do not want the columns disturbed (justification causes proportional spacing),you will not want justification. It is necessary that you be able to turn off justification, and with LETTER PERFECT this is quite easy. To turn the justification off, you must put a lower-case "j" in the format line prior to the part of the text where you want it turned off and put the number "0" as follows: [CTRL] [F] j0 [RETURN]. If you want the justification off for one section only, you must turn it back on after that section. To do this you type another format line with a lower-case "j" followed by the number "1," which indicates justification. If you use an "r" or "d" in a format

line, justification will be turned on since it is a default
setting.

JUSTIFICATION PROBLEMS - Occasionally you will find that during
the printing of your text you have a blank area at the end of a
line when the previous line and the line following it printed
correctly. See Figure 4 for an example of this.

FIGURE 4

Lengthwise of all the words in English,
antidisestablishmentarianism ranks as one of the longest.
Long words such as this might present problems for this
word processing program.

As you can see from the example in Figure 4, the word "English"
is the last word in the first line. It is also not justified to
the right-hand side as are the following two lines. The reason
for this is that the word following "English" is very long and
will not fit in the remaining space on the line. While this
illustration is a graphic one, it would not necessarily take a
word like "antidisestablishmentarianism" as the last word in a
line to cause the problem. Any line with several long words or
ending with a very long word can cause this problem. There is a
way to use this word and still have a justified line. You must
manually correct the word and hyphenate it within the body of
the file. If you type: "Lengthwise of all the words in
English, antidis- establishmentarianism ranks as one of the
longest." ("antidisestablishmentarianism" has been hyphenated,
with a space following the hyphen), the computer treats this as
two words and thus accomplishes right-hand justification.
Anytime you have this problem, just go to the EDITOR and
hyphenate the first word of the next line following the

non-justification, leaving a space after the hyphen. Figure 5 is the same example with the word hyphenated as described above.

FIGURE 5

Lengthwise of all the words in English, antidis-establishmentarianism ranks as one of the longest. Long words such as this might present problems for this word processing program.

The use of the adjusted margin with the proportional font may cause minor difficulties. The left justification of the adjusted margin may cause some variance because all spaces in the margin are twelve dots wide. The proportional font allows for variation in the individual character; therefore, the alignment may not be as straight as desired. To obtain optimal results it is best to experiment.

LINE SPACING - Line spacing is single, double, or triple spacing on the typewriter. With the computer you are not limited to these three choices. To control line spacing, put the lower-case "l" in the format line. Following the "l" put the number for the spacing selection that you wish. "l" will be for single spacing, "2" for double spacing and "3" for triple spacing. The format line for double spacing would be [CTRL] [F] 12 [RETURN]. The default for line spacing is single space. Unless you indicate otherwise, this will be the type of spacing you receive.

ADJUST MARGIN - The adjusted margin is used when you have a number of items to list and you wish to indent after the number. Figure 6 is an example of adjusted margins with directions on how to use this function.

FIGURE 6

1. First the format line was changed
   preceding this section. [CTRL] [F]
   ml7w45lla4 [RETURN] was the format line
   that was used in this example.

2. The left margin was indented to 17
   spaces. The line width was shortened to
   45 spaces so as to block the indented
   section. The line spacing was changed to
   single spacing. Finally the margin
   adjustment was made to four spaces so
   that when the text was printed, all lines
   after the first line would be indented
   four spaces automatically.

3. After the first section was typed, a
   [RETURN] was used and then another format
   line was typed to prepare the second
   number. This format line set was:
   Fml7w45a4<.

You have to set the format line between each section to be
blocked. You must always issue a [RETURN] first and then type
the format line again. In the format line you must reestablish
the left margin, page width and indented margin setting because
the program prints the first line and then automatically changes
the left margin an additional four spaces. This new margin will
remain in effect until you change it back. If you fail to issue
a [RETURN] and set the margins again (and only used the Fa4
before the first section), all that follows will be in line with
the first body section. The thing to remember is that, after
the "a4" format command, the program instructs the printer to go
over four spaces after it prints the first line. It will follow
these instructions until you instruct it to do differently. For
the second itemized section you want it to go back to the
original margin and begin the procedure again. You have to tell

it to do this by repeating the format instructions. While this may seem a little difficult the first time, it will become routine after using the program a few times.

The use of the adjusted margin with the proportional font may cause minor difficulties. The left justification of the adjusted margin may cause some variance because all spaces in the margin are twelve dots wide. The proportional font allows for variation in the individual character; therefore, the alignment may not be as straight as desired. To obtain optimal results it is best to experiment.

BOTTOM MARGIN - The bottom margin command allows you to change the bottom margin from the default setting of five line spaces. You will receive a bottom margin of five lines if you set no formats, use reset standard or use default values for your format values. If you want a bottom margin different from five spaces, you must indicate this with a "b" for bottom margin in your format line. To set the bottom margin to 10 spaces, you would type [CTRL] [F] b10 [RETURN]. To change back to the default value, you can reverse the process or use "r" for reset standard or "d" for default values in a format line before the section where you want them reset to the five lines.

PAGE NUMBERING - Page numbering has been discussed briefly in the header, footer and format function "n" sections of this manual. The versatile use of page numbering will be discussed in detail here. If you want to put the page number at the bottom of the page, you will do this with a footer line. When you enter the EDITOR and are beginning a long text in which you want the number printed at the bottom of the page, you will give the commands for numbering at the beginning of the text, and

they will be in effect throughout the printing of the text. To
do this you will use a footer line command by holding down the
[CTRL] key and then pressing the [G] key, which will give you an
inverse "G." Following the "G" you can indicate that you want
the number centered by doing a [CTRL] [C] command. Type the at
sign (@) following these commands, and this will be printed as
the page number when the text is printed. This is how this will
appear on the format line:

<u>GC</u> -@-

The underlined upper-case characters in this example are control
characters. The "G" denotes a footer line, and the "C"
instructs the program to center what follows. The "@" sign has
a dash on either side which causes the effect that you see with
the page numbering in this manual. The "@" symbol will be
replaced with the number when the page number is printed. The
program is so written that the default for page numbering is
zero. This means that the page numbering will start with the
number "1." While this default value of "0" may seem confusing,
it does have the purpose of allowing you to start numbering with
any number that you desire. If you are typing a long manual and
want to print just the last 11 pages of a 100-page manual, you
can do this and have the page number start with page "90." This
is achieved by using the lower-case "n" followed by the number
"89" in the format line. The format line in this example will
look as follows:

<u>GC</u> -@- [RETURN]
<u>F</u>n89 [RETURN]

Everything is the same as in the previous example except that a format line with the "n89" has been added. When the text is printed, the first page number will be page "90." As you can see, page numbering is easily accomplished.

STARTING NUMBERS IN PAGE NUMBERING

You have several alternatives in page numbering with LETTER PERFECT. These alternatives change depending upon the page number being in a header or a footer line.

HEADER NUMBERING - If you place the format line with the "n" and page number at the beginning of the text, before the first line is printed, then the page number that is printed on the first page will be that number, "n", plus "1". If the format line, for "n", occurs after the first line to be printed, then the page numbering will begin with the "n" number used in the format line. The command for a header must be entered prior to the first line to be printed, otherwise, it will not occur on the first page and will not occur until the second page is printed. This is one way to start the page numbering on page two in a header line. Do not enter the header for page numbering until after the first line of text. Page numbering will begin with page "2" and you need not bother with an "n" in a format line to indicate what number you wish to start.

FOOTER NUMBERING - Page numbering within a footer requires only that you enter the footer command somewhere on the first page of the printed text. The number will begin with page "1". To start with a different number you may either enter the number prior to first line being printed or after it. If you enter the format line with the "n" number prior to the first line to be

printed then it will begin printing with the "n" number plus
one. If you enter the format line and the "n" number after the
first line to be printed then the number that will be printed
will be equal to the "n" number. If you want the page numbering
in a footer to begin with page "2" then you should wait until
the second page of print before you tell the program you want to
have a footer. It will not be necessary to tell it to begin
with page "2". If you want it to begin with a page number other
than page "2", you will have to indicate so in a format line.
In this case, you would make "n" equal to the number of the page
to be printed.

FORCED END OF PAGE - TOP OF FORM - The forced end of page
allows the user to cause the printer to stop printing in a file,
go to top of the next form, and continue printing at the point
where it left off. This is described as "top of form" on the
command sheet. Any time you hold down the [CTRL] key and then
press the [P] key you will have an inverse "P" appear on the
video screen. The [P] when encounter in the text during the
printing of the text will stop the printing of the text on that
sheet of paper. The printer will then advance the paper in the
printer to the next sheet and continue printing at the same
point where it left off.

The [CTRL] [P] can be used quite easily in the body of the text
for editing pages of text. When you are printing a lengthy
document and do not want a single line from a paragraph at the
end or at the beginning of the page you should use this command
to force a premature end of page. It is not necessary that the
[CTRL] [P] be placed at the end of a sentence or paragraph, but
when it is placed in the middle of a sentence it will cause the
same effect as a carriage return. This is to say, it will erase

the information that follows it on the given line it is being entered on. You should therefore provide a line of text with the [CTRL] [A] [P] command prior to doing a [CTRL] [P] in the middle of a line. You should then take out the leading spaces in the line of text you have provided so it starts printing that line at the left margin.

This command can have multiple uses including the printing of single paragraphs to a page for easy editing, proof-reading and reassembly to the document form by just removing the [CTRL] [P]'s.

PRINTING A FILE - You may use your Atari printer to print a file in memory. You do nothing to use the proportional spacing since it is a function of the printer. Your printer should be in the "on line" position to accept data from the computer, and your printer and your interface box should be turned on. You will go from the file in memory to the main menu by use of the [ESC] key. In the main menu move down to the PRINTER selection by using the greater than [>] key, and when the arrows are resting on PRINTER, press [RETURN]. You will then be asked for the number of copies. By pressing [RETURN] you will get the default of one copy, or you may type in any number up to 255. (If you type in "0" number of copies, you will be returned to the main menu.)   After typing in the number and pressing [RETURN], you will get the following message: "PLACE PAPER AT TOP OF FORM - PRESS [RETURN] WHEN READY." The tear line of the paper should be aligned with the print head and not the tear bar when you print a file. The program counts the printer head as the top of the paper. When you have done this, you may step back and watch your printer do its job of printing the file. If you want to stop the printing of the file at any time, you may

do so by pressing the space bar. You may start the printing again with the same keystroke. The printing will resume where it stopped with nothing lost during the nonprinting time. If you want to abort the printing, you may do this by pressing the [ESC] key; the printer will stop, and you will be back at the main menu. Once a file is printed completely, the computer will show a disk directory and ask if you want to print another file. You can type the name of the file you want to print next and have the printer continue, or you can go back to the main menu by pressing [RETURN].

PRINTING OPTIONS - You can also print a selected page or pages in a multi-page document. In printing a file, you have a number of options:

1. Printing one copy of the whole document
2. Printing multiple copies of the whole document
3. Printing a single page of a document
4. Printing multiple copies of a single page of a document
5. Printing a single copy of a series of pages
6. Printing multiple copies of a series of pages

As indicated above, after going to the PRINTER option and pressing [RETURN], you will be asked for the number of copies. You may respond in one of several ways. By pressing [RETURN], you will get the default of one copy of all pages in the file. If you want to print a single page of a multiple page document, you should begin by typing the number "1" or a comma [,]. (The comma allows you to take advantage of the default number of copies, i.e., "1.") You must follow the comma by the page number of the single page you wish printed. After the second number, another comma should be placed and a third number typed.

The third number is the last page to be printed. If you want
one copy of page 5 in a 10-page document, you should type 1,5,5
[RETURN]. If you type 1,5, [RETURN], you will get one copy of
pages 5 through 10. By not typing in the last number, it
defaults to the end of the text. Below is a breakdown of what
you need to know for each of the three numbers:

    a. First number is the number of copies desired.
    b. Second number is page printing is desired to start on.
    c. Third number is page in which printing is to stop.

All numbers must be separated by commas; failure to enter a
number will cause the default value to be inserted. The default
value for the first number is "1," for the second number is "1,"
and for the third number is the last page of text. Pressing
[RETURN] will give one copy of the entire text, with no numbers
or commas necessary. Consider the following examples for a
10-page file:

    a. 5,5,5 [RETURN]   (five copies of page 5)
    b. 1,5,7 [RETURN]   (one copy of pages 5 through 7)
    c. 2,5,7 [RETURN]   (two copies of pages 5 through 7)
    d. 1,5,   [RETURN]   (one copy of page 5 through end)
    e.   [RETURN]   (one copy of entire text)
    f. 0   [RETURN]   (abort printing; return to main menu)

Before printing, you can view screen pages on the video screen
with the SCREEN FORMAT option on the main menu in the same way
as with page printing above. Follow the directions in the
preceding paragraph.

EPSON PRINTER - To use LETTER PERFECT with the Epson printer you should first load the side of the diskette marked "EPSON." Failure to do so will cause printing irregularities. This side of the program diskette is designed to work with the Epson Series printer, as well as the GRAFTRAX option. These printers each have different characteristics. The differences in each is pointed out in the next section. The default font with the Epson printer is the 10 cpi. Font 1 is the condensed font, font 2 is the enhanced font, and font 3 is the enhanced double strike font. The expanded font is expressed as boldface and may be used in a line with any of the other fonts while keeping justification in tact. Any of the other fonts can be used with the special print command. You should look in this manual under the "ESCAPE CODES" section in order to get an understanding of how to do this.

MX-80 This printer does not support "super" and "sub" scripting. With the Graftrax option it does support underlining for only three to four characters before a "time out" occurs. This is a function of the Atari computer and not the software. The italicised font is turned on with the superscripting command and turned off with the subscripting command.

MX-100 This printer is not the same as the MX 80 with GRAFTRAX. It does support graphic options that the MX 80 does but it is not identical to the 80 with Graftrax. It does not support super and subscripting, it does not support the italicized font, it does not support underlining. It does not have the double strike enhanced font, i.e. font "3" with the MX-80. Check with your dealer or Epson regards just what this printer can and cannot do. It can only do these things if the GRAFTRAX option is added to this printer.

Atari 825, Centronics 737,739 PRINTERS - These printers should all be loaded with the side of the program marked "ATARI 825" side. This printer does support underlining, super and subscripting. You should see those sections of the manual that explain how to do each. The default font with this printer is the **proportional font** with true proportional spacing. This font has the equivalent of 12 character per inch (cpi). The default left margin is "12" and the width defaults to 78. This "proportional" font allows for variance in the individual character. The character "a" can therefore be smaller or larger than the same "a" located in a different position. This variability allows for a very clean printed output and is called "proportional." Because of this true proportional spacing you may notice some irregularities with the adjust margins. Because a character can change its size according to position the left justification will not always be in alignment. Practice in the use of the adjusted margin will improve the final output.

Font 1 with this printer is the condensed font, font 2 is the 10 cpi font. The expanded font is used for boldface. Boldface font may be mixed with any other font in a line and justification will remain intact.

VII. EDITING A TYPICAL LETTER

On the following two pages you will see two sample letters. The first is sample "A", an example of a business letter typed on a typewriter. On the next page is sample "B", the same letter edited by LETTER PERFECT in a matter of a few minutes. The first letter is not justified, the second letter is justified. The errors that occur in the first letter will be corrected with the use of the Atari commands. Take out the command page and

LETTER PERFECT ATARI

"SAMPLE A"

                    3708 Johnson Road
                    Granite City, Illinois   62040
                    November 1, 1979

MR. HOWARD CUMMINGS
5811 flaming Leaf Court
North Chicago, Illinois 60064

Thank you for your recent inquiry about our product. Yours has
been one of many that we received and the favorable introduction
of it to the market is most encouraging.

At the present time time we have been handling the orders we
have received on a first come basis.

     We anticipate that production will meet inventory
requirements in about two weeks. We are sorry for this
inconvenience, but will make arrangements for you to receive
your order in the quickest time possible.

We are sending under seperate cover, our most recent
publication, UNDERSTANDING MICROCOMPUTERS. This publicaton is
we feel a valuable contributions to this new product and hope
that it will serve to compensate you for having to wait for your
order.

If there is any way that we be of further service to you, or may
help you during this delay feel free to contact us.

                    Sincerely yours,

                    Robert C. Berryworth
                    Customer Relations

RCB:KLB

"SAMPLE B"

3708 Johnson Road
Granite City, Illinois   62040
November 1, 1979

MR. HOWARD CUMMINGS
5811 Flaming Leaf Court
North Chicago, Illinois 60064

Dear Mr. Cummings:

Thank you for your recent inquiry about our product. Yours has
been one of many that we have received and the favorable
introduction of it to the market is most encouraging.

At the present time we have been handling the orders we received
on a first come basis.

We anticipate that production will meet inventory requirements
in about two weeks. We are sorry for this inconvenience, but
will make arrangements for you to receive your order in the
quickest time possible.

We are sending under separate cover, our most recent
publication, UNDERSTANDING MICROCOMPUTERS. This publicaton is,
we feel, a valuable contribution to this new product and hope
that it will serve to compensate you for having to wait for your
order.

If there is any way that we may be of further service to you,
during this unanticipated delay, please feel free to contact us.

Sincerely yours,

Robert C. Berryworth
Customer Relations

RCB:klb

set it on top of your monitor for quick reference. As you can
see the second letter is "LETTER PERFECT." The best way to
learn is by doing so sit down and load the file "SAMPLE" from
your program diskette and work along with the explanation. You
are about to find a simple way to correct, modify, and prepare a
letter with your new friend "LETTER PERFECT."

The first thing we want to do is to change the formatting of the
letter. The cursor is resting on the format line so all we have
to do is to type [CTRL] [F] for format,type the small character
"d" and press the [RETURN] key. This changes the letter to the
default formats and will automatically reset the margins and
justification.

We now want to insert some lines between the header and the
addressee's name. Four lines are needed to block the letter so
we simply use the [SHIFT] [INS] function four times followed by
a [RETURN]. Each key stroke will add one line. Note that the
word "flaming" should be capitalized. We use the [CTRL] [R]
(replace and search) function to easily edit this error. At the
top of the screen will appear the words "SEARCH FOR:" Simply
type the word "flaming" and hit the [RETURN] key. Automatically
the top of the screen will now read "REPLACE WITH:". All you
have to do is type the word "Flaming" (capitalizing the "F") and
hit the [RETURN] key. The text will scroll down to the error
that you searched for and replace it with the correction that
you wanted. Hitting the [ESC] key will stop the search and
replace.

We now use the down cursor control to move the cursor down. You
may just hold the cursor key if you want to move quickly. Type
in the salutation "Dear Mr. Cummings:" and hit the [RETURN] key.

The salutation has now been added.

You continue to use the down cursor key to move to the second paragraph. You use the right cursor key to advance the cursor over to the word "time". We want to delete this word so we use the [CTRL] [DEL] five times to remove the word "time" and the additional space.
There are no other corrections that we will be able to see on the screen at this time so we use the [CTRL] [Q] function to scroll to the next page. Do a [CTRL] [T] to home the cursor to the top of the page to begin editing this page.

Move down the page to the next paragraph. We want to insert a line between these two paragraphs and can do so with a [CTRL] [INS] function. Press the [RETURN] key to add the line and you are done.

The next paragraph has a tab of five spaces and you need to remove the spaces. Do a [CTRL] [DEL] five times and these spaces are removed.

The next error is the underlining error. You want to remove the underlining. Move to that portion of the text and have the cursor fall on the space before the "U". The function [CTRL] [DEL] will remove the underline command.

At this time the text may have an odd appearance. The words have been moved forward and backward so that the text may be difficult to read. This is easily corrected. Do a [CTRL] [I] and press the [RETURN] key. The screen will scroll through the entire text and be back at the beginning. You can move to that same section by scrolling a character at a time. Use the [CTRL]

[O] function. If you want to move slower hold down the less than [<] key and to move faster hold down the greater than [>] key. To stop the scrolling where you left off press the [ESC] key.

No additional errors are seen so we do a [CTRL] [Q] to scroll to the next page. Move the cursor to the "KLB" which we want to put in small characters. Retype the letters "klb" and that correction is made.

The text has now been edited. You may review the text by going to the beginning with a [CTRL] [CLEAR] function. Additional [CTRL] [Q] functions will scroll a page at a time or use [CTRL] [O] to scroll a line at a time.

Now all we want to do is quit. Do an [ESC] and you will be back to the main menu. You may elect to print or save the now corrected letter. We suggest that you save your text before going to the printer. This practice will prevent you from losing some of your text.

We have left a few errors in this letter. See if you can find them and think what you would do to correct them in the easiest manner.

PROGRAM REGISTRATION

The name "LETTER PERFECT" and the program itself are copywritten and are protected under copyright laws. They are the exclusive property of LJK Enterprises Inc. Each diskette is written with maximum protection for both LJK Enterprises Inc. and you the user of this program. If you attempt to copy this program you

<u>could destroy the diskette and LJK Inc. will not be liable for</u>
<u>damage to the program</u>. We want to be fair and give the user
some protection for his investment. The first page of this
manual is a program registration certificate and software
license agreement. Fill in both sides of this form and send it
to LJK Enterprises Inc. This must be done within ten days of
your purchase. This is an important step in protecting your
investment. After we receive this certificate we will return to
you a postcard confirming that we have received the registration
certificate. Keep this confirmation card for your records. You
must sign the second side. If you do not do this we will not
register your program.

In the event that you destroy a diskette and it was not done in
an attempt to copy the diskette, we will replace the first
diskette for a $10 charge. This is to cover the cost of the new
diskette and postage. After this first replacement you will be
charged $30. The damaged diskette, replacement fee, and program
registration number must be returned to LJK Enterprises Inc. in
either case or we will not send a replacement copy. LJK will
not accept any COD shipments. If you desire a backup copy of
LETTER PERFECT you may receive one. On receipt of $30 (payable
to LJK ENT. INC.) and confirmation that you have sent in your
Registration Form and signed the Software License Agreement, a
backup copy of LETTER PERFECT will be sent. You will receive a
duplicate copy with a duplicate program registration number.
This is why it is very important that you register the program
and sign the Software License Agreement.

We have "write protected" your diskette and suggest you do not
take this off. You will have to use the Format Disk section of
the main menu to create data files for this program. Because of

the different way we use the Disk Operating System you will not be able to use diskettes that are initialized with the Atari initialization program.   LJK ENTERPRISES INC. accepts no liability, expressed or implied, for the use of our program or any damage that could result to your system itself from the use of our product.

APPENDIX -   ASCII CODES

ASCII HEX	DECIMAL VALUE	HIGH BIT DECIMAL	KEY COMBO
$00	0	128	CTRL @
$01	1	129	CTRL-A
$02	2	130	CTRL-B
$03	3	131	CTRL-C
$04	4	132	CTRL-D
$05	5	133	CTRL-E
$06	6	134	CTRL-F
$07	7	135	CTRL-G
$08	8	136	CTRL-H
$09	9	137	CTRL-I
$0A	10	138	CTRL-J
$0B	11	139	CTRL-K
$0C	12	140	CTRL-L
$0D	13	141	CTRL-M
$0E	14	142	CTRL-N
$0F	15	143	CTRL-O
$10	16	144	CTRL-P
$11	17	145	CTRL-Q
$12	18	146	CTRL-R
$13	19	147	CTRL-S
$14	20	148	CTRL-T
$15	21	149	CTRL-U
$16	22	150	CTRL-V
$17	23	151	CTRL-W
$18	24	152	CTRL-X
$19	25	153	CTRL-Y
$1A	26	154	CTRL-Z
$1B	27	155	ESCAPE
$1C	28	156	N/A
$1D	29	157	CTRL-SFT-M
$1E	30	158	CTRL-SFT-N
$1F	31	159	N/A

INDEX

It's simple.

You're holding the key to understanding your LJK software. Don't be alarmed by its size. This document will help you get your software up and running in no time. Then, when you're ready to move on, it will show you the finer points of using LJK software...step by step in clear, simple language.
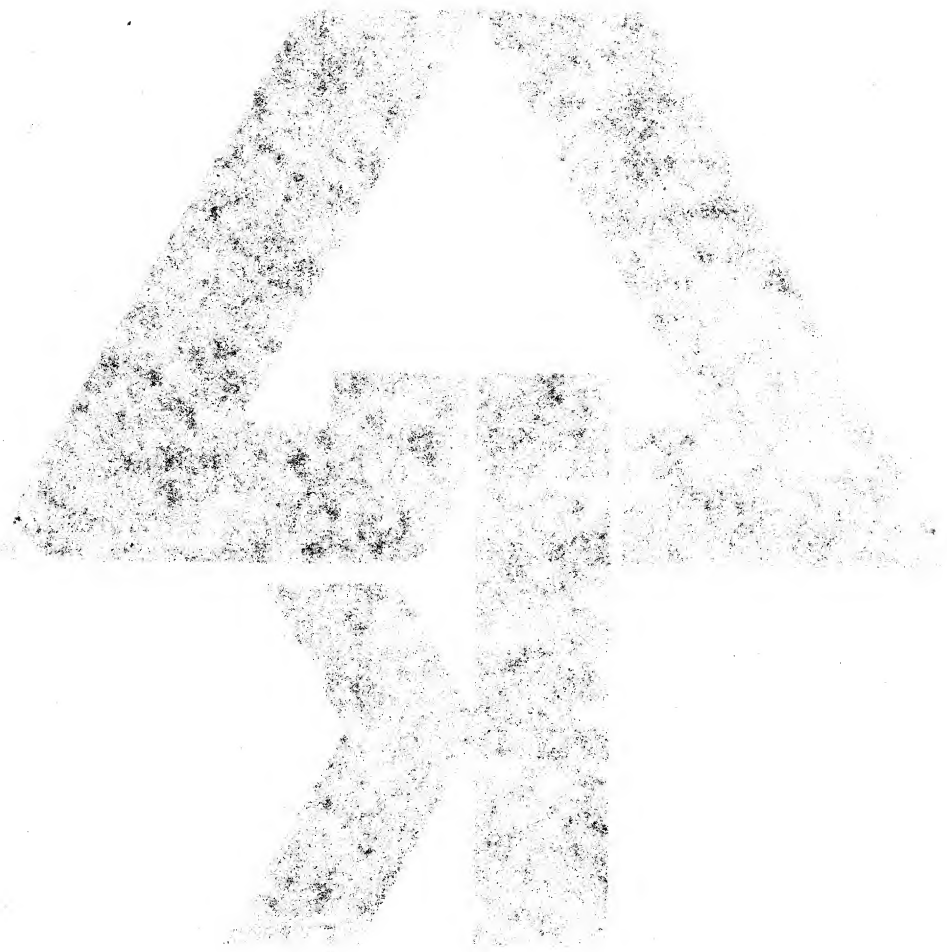
Software that's simple to learn and hard to beat

Letter Perfect™

If you know how to type, Letter Perfect will have you word processing almost instantly. Spend 15 minutes with Letter Perfect and you'll know how to create a letter or other document, move words and paragraphs, underline text, and more. Spend an afternoon and you'll wonder how you ever put up with a typewriter. Letter Perfect works with any Atari-compatible parallel printer and any Apple-compatible printer, parallel or serial. Search, replace, global replace, underline, bold face, reformatting (page width, line spacing, etc.), merge files...Letter Perfect does all this and then some with simple, logical commands.

Data Perfect™

Computing isn't what it used to be. It's easier now. And you can do a lot more. In fact, your computer is a fantastic machine capable of helping you organize your time and thoughts in ways that will amaze you. Data Perfect can get you started on this road to more efficient use of your talents. In no time you'll be able to start files on your budget, check book, phone & mailing lists, travel expenses, insurance inventories and just about anything you want to keep track of. Lay out your family tree. Create your own wine tasting chart. Catalog your record collection. Data Perfect is menu driven for easy operation. And it lets you add or delete information as necessary without rewriting entire files. It's fast because it's written in machine language. Data Perfect even has a built-in calculator.

Spell Perfect™

New from LJK. Spell Perfect is a fast and efficient way to check your letters, reports and other documents for embarrassing spelling mistakes. It comes with a complete, all-in-one dictionary that lets you add an unlimited number of technical terms, foreign words, proper names and other unlisted words. And Spell Perfect doesn't just mark unlisted words. It gives "sounds-like" suggestions so you don't have to look up the correct spelling. Misspelled words that occur throughout a file can be corrected automatically. Spell Perfect is everything you'd expect in a program from LJK.

Gnome™

Gnome is the programmers' professional development package. It has everything needed for assembly language programming for the 6502 microprocessor. It's an editor, monitor, assembler and disassembler, all in one single load program. Formerly "Edit 6502," Gnome is more magical than Merlin and tastier than Big Mac. It's known to professional Apple and Atari software writers across the continent. Now it's available to you.

"Firmware Boards"

LJK leads the way again with a product that turns any Apple computer into the consumate programming machine. The Gnome firmware board is for the customer who uses the computer primarily for programming or investigating assembly language programs. It's just like the disk version of Gnome, but it's ready-to-go as soon as the computer is turned on. It's the ultimate development package.

Letter Perfect is also now available as a firmware board. Just plug it into an Apple and the computer is ready for word processing every time it's turned on. It's great for writers.

With firmware boards from LJK, there's no program to load. No operating system to boot. Packaged for user installation, the firmware board is just the kind of idea LJK is famous for. This, as they say, is only the beginning.

Atari File Utility

This menu driven program converts files from the Atari DOS format to the LJK DOS format and back again. It lets you edit Atari files using Letter Perfect and satisfies limited data base needs such as form letter generation.

Apple Lower Case Generator

Attaches right to Apple II and II+ (revision 7 or later) motherboards to allow you to write in upper and lower case. It has true two-dot descenders. Easy installation instructions and complete directions for shift key modification included.

Atari ROM Cartridges

Most LJK Atari software is available on plug-in ROM cartridges as well as disks. Take your pick!

LJK software — Simple to learn, hard to beat.

LJK is rapidly gaining the reputation of a leading software supplier to users of the most common micro systems. But we're not stopping there. In the coming months, look for LJK to introduce many more software packages that are complete and easy to use.

Software License Agreement

Fill out and return the card below.
It must be signed to register your program.

LJK, Inc. has sold or will sell to the undersigned ("purchaser") magnetic diskettes containing original data and programs expressed and arranged in electronically coded and magnetically stored form. LJK has sold or agreed to sell the diskettes only upon the condition that the purchaser acknowledge and agree to the following.

1. The purchaser understands and acknowledges that the data and programs recorded on the diskettes are copyrighted original works of authorship and are unique proprietary material of LJK.

2. The purchaser will not create or prepare any derivative materials from the program recorded on the diskette, nor will the purchaser translate such data and programs into another computer system or create any combination which includes any portion thereof, nor allow others to do so.

3. The purchaser will not sell, transfer or distribute, to the public any copy or reproduction of the data or program recorded on the diskette.

4. The purchaser acknowledges that LJK makes no warranty or representation whatsoever with respect to the data and programs recorded on the diskettes, and that neither LJK nor any author thereof will be responsible for error or omissions therein or erroneous or inaccurate application of any results from the use thereof.

LJK, INC.
PURCHASER _____ DATE _____

PROGRAM REGISTRATION FORM: PROGRAM NUMBER ___6473___

PLEASE FILL OUT & RETURN THIS CARD WITHIN 10 DAYS OF PURCHASE SO WE CAN NOTIFY YOU AND/OR YOUR DEALER OF ANY ENHANCEMENTS OR REFINEMENTS AVAILABLE FOR YOUR LJK SOFTWARE. CARD MUST BE SIGNED TO REGISTER YOUR PROGRAM.

PURCHASER'S SIGNATURE _____

2010

Purchaser's Name
Mr. _____
Ms.
Address _____
City _____
State _____ Zip _____
Type of Store Purchased from —
☐ Software Specialty
☐ Electronics Store
☐ Franchise Computer Dealer
☐ Independent Computer Dealer
☐ Dept. Store/Mass Merchant
☐ Other _____
Please answer the following so that we may better answer your questions should you require any assistance.

SYSTEM INFORMATION —
Purchased for: ☐ Atari   Model #
             ☐ Apple   _____
             ☐ Other _____
MEMORY SIZE: _____
MODEM: ☐ YES ☐ NO   BRAND _____
PRINTER TYPE: _____
PRINTER INTERFACE TYPE: _____
OF DISK DRIVES: ☐ 1 ☐ 2 ☐ 3 ☐ 3+
OTHER HARDWARE: _____
OTHER MODIFICATIONS: _____
_____

Purchased at:
Store Name _____
Address _____
City _____
State _____ Zip _____
COMPUTER PRIMARY USE: ☐ BUSINESS
☐ HOME ☐ BOTH
BUSINESS:
☐ Accounting ☐ Word Processing
☐ Spread Sheet Analysis ☐ Data Base
Management ☐ Other _____
HOME:
☐ Education ☐ Household Records
☐ Games ☐ Programming ☐ Word
Processing ☐ Other _____

PURCHASER INFORMATION —
How many micro-computers do you own?
☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ More than 5
Number of years owned or used micro-computers?
☐ Less than 1 year. ☐ 1 year ☐ 2 years
☐ 3 years ☐ More than 3 years.
How did you hear about LJK software?
☐ Advertisement ☐ Editorial/Review
☐ From a friend ☐ Users Group
☐ Recommended by dealer ☐ Saw in store ☐ Other _____

What other LJK software do you own?
☐ NONE ☐ Letter Perfect ☐ Data Perfect
☐ Spell Perfect ☐ Lower Case Generators
☐ Edit 6502/Gnome ☐ Atari File Utility
How many other programs of any type do you think you will buy in the next 12 months?
☐ NONE ☐ 1 ☐ 2 ☐ 3 ☐ 4
☐ More than 4
Purchasers Age: ☐ Under 18 ☐ 18-24
☐ 25-34 ☐ 35-49 ☐ Over 50
Male or Female: ☐ MALE ☐ FEMALE
Married: ☐ YES ☐ NO
Number of Children: ☐ 1 ☐ 2 ☐ 3
☐ More than 3
Family Income: ☐ Under $15,000 ☐ 15,000-25,000 ☐ 25,000-35,000 ☐ Over $35,000

USER INFORMATION —
What is the one thing you use your computer for the most?
☐ Games ☐ Education ☐ Household Records ☐ Word Processing ☐ Data Bases ☐ Programming ☐ Accounting ☐ Business Analysis ☐ Other _____
Is the primary user Male or Female?
☐ MALE ☐ FEMALE
Primary user's age? ☐ Under 18
☐ 18-24 ☐ 25-34 ☐ 35-49 ☐ Over 50

LETTER PERFECT, DATA PERFECT, SPELL PERFECT, EDIT 6502, UTILITY AND LOWER CASE are trademarks of LJK, Inc. ATARI is a trademark of the Atari Computer Company. APPLE is a registered trademark of Apple Computer, Inc.

PLACE
STAMP
HERE

BUSINESS REPLY MAIL

LJK, INC.
7852 Big Bend Blvd.
St. Louis, MO 63119
(314) 962-1855